

DR. C. LE NEVE FOSTER'S REPORT.

# eneral Collections +P Dr. C. Le Neve Foster's Report.

REPORT upon the Inspection of Mines classed under the Metalliferous Mines REGULATION ACTS in the Counties of Anglesey, Brecon, Cardigan, Carnar-VON, DENBIGH, FLINT, MERIONETH, MONTGOMERY, RADNOR, and SHROPSHIRE, and in the Isle of Man, for the Year 1886.—By C. Le Neve Foster, Esq.,

B.A., D.Sc., F.G.S.

Llandudno, 21st March 1887. SIR, In compliance with section 20 of the Metalliferous Mines Regulation Act, I have the honour to present you my Annual Report for the year ended 31st December 1886.

I have divided my Report into four chapters, as follows:—

Chapter I.—Summaries of Annual Returns. Persons employed, and minerals produced at mines and openworks.

II.—General list of fatal and non-fatal accidents. Summary. Comparison with the previous 11 years. Accidents due to breaches of the Act or of Special Rules. Comparison between Metal mines and Slate mines as regards accidents.

III.—Prosecutions: Barmouth, Benallt, Brynfelin, Diphwys Casson, Great Manod, Rushen, Snowdon, and Wrysgan mines. Bugail and Oakeley Upper mines.

IV.—General Remarks: Exemptions under the Slate Mines (Gunpowder) Act. Special rules. Abandoned mines. Plans. New mines. Manganese mining in Merionethshire. Ventilation. Barracks for workmen. Prevention of crane accidents. Improper conveyance and thawing of dynamite. Summarv of work.

PERSONS EMPLOYED, AND MINERALS CHAPTER I.—SUMMARIES OF ANNUAL RETURNS. PRODUCED AT MINES AND OPENWORKS.

The following table gives a summary of the returns of persons employed in and about the mines in my district:-

Persons employed in 1886.

		Under	ground.				Abo	ove G	roun	1.		and
Situation of Mines.		Male H	Persons.			ges o 13.	Age 13 to			Ages ove 18.		rground ound.
	Ages 12 to 13.	Ages 13 to 16.	Ages above 16.	Total.	Males.	Females.	Males.	Females.	Females.	Males.	Total.	Total underground above ground.
Copper, Lead, Zinc, and other Mines, exclusive of Slate Mines.									1			
Anglesey -       -       -       -         Breconshire       -       -       -         Cardiganshire       -       -       -         Carnarvonshire       -       -       -         Denbighshire       -       -       -         Flintshire -       -       -       -         Merionethshire       -       -       -         Montgomeryshire       -       -       -         Radnorshire -       -       -       -         Shropshire -       -       -       -         Isle of Man       -       -       -         Totals, exclusive of the Slate mines       -	1 1	3 11 -3 2 1 -1 8 -29	25 15 434 192 312 447 209 94 2 286 588 2,604	25 15 437 203 312 450 212 95 2 287 596 2,634			8 -1 114 45 65 48 8 10 -1 16 138	9	2 77 5 — — 5 7	85 2 177 79 243 114 93 71 — 145 309	97 2 379 129 308 163 101 81 — 166 456	122 17 816 332 620 613 313 176 2 453 1,052
SLATE MINES.												
Carnarvonshire		3 —	49 7 2,199 5	49 7 2,202 5	=		14 258 —			159 1 1,929	173 1 2,187	222 8 4,389 5
Totals for the Slate mines		3	2,260	2,263			272			2,089	2.361	4,624
Totals for all the mines	1	32	4,864	4,897	5	-	724	11	96	3,407	4,243	9,140

# REPORTS OF INSPECTORS OF MINES.

The total number of persons employed in and about the mines was 9,140, of whom were females working above ground. After having had to record a serious decline in mining population of my district from 1882 to 1885, it is cheering to notice a turn of tide. Compared with the previous year, there is an increase in 1886 of 347 persons, 3.9 per cent. This increase is due entirely to more activity in metal mining, for at the underground slate quarries there is a decrease in the total number of hands.

The quantities and values of the mineral dressed and of the undressed mineral sold, treated,

or used at mines in my district during the year 1886 were:-

. County.	Statute Tons.	Value at the Mines.	
Baryte	s.		
Denbighshire Montgomeryshire Shropshire	16 736 3,076 3,828	£ 13 367 3,518  3,898	
		<u> </u>	
COBALT AND NI	CKEL ORE.		
Flintshire	100	£ 526	
Copper C	)re.		
Anglesey Cardiganshire Carnarvonshire	8 62 455	£ 9 272 1,926	
	525	2,207	
Copper Prec	IPITATE.	,	
Anglesey	380	£ 2,481	
Iron Or	·E.		
Denbighshire	13	£ 5	
Iron Pyrij	res.		
Anglesey Carnaryonshire	9,792	£ 130 6,854	
	10,003	6,984	

	Count	у•			Statute Tons.	Value at the Mines.	
			LEAD	ORE.	·		
Breconshire Cardiganshire Carnarvonshire Denbighshire Flintshire - Isle of Man Montgomeryshir Shropshire	- - - - -	-	- - - - - -	-	43 1,744 1,162 1,512 2,180 6,257 917 2,592	£ 309 16,601 10,773 14,031 20,554 80,081 9,202 22,579	
					16,407	174,130	
			Limes	TONE.		,	
Flintshire - Shropshire		-	:	-	3,663 4,955	£ 269 894	
					8,618	1,163	
			Mangani	ese Or	Е.		
Carnarvonshire Merionethshire	-			-	99 11,285	£ 142 7,955	
					11,384	8,097	
1			Ochre at	yn IIw	BE D		
1			OCHRE AL		DER.		
Anglesey -	-	-	-	-	2,831	£ 5,500	
		SLATI	E AND SLA	ABS (DE	RESSED).	'	
Carnarvonshire Denbighshire Merionethshire	-	-	- - -	:	4,650 63 135,814 140,527	£ 12,448 70 388,514 401,032	
1			Zinc	ORE.		,	
						£	
Anglesey - Cardiganshire Carnarvonshire Denbighshire Flintshire - Isle of Man	-	- -, - -		-	697 3,423 209 6,700 1,184 4,795 599	1,100 9,060 302 23,242 3,688 16,876 1,030	
Montgomeryshin Shropshire	re - -	-	-	-	115	352	

The number of persons employed in my district during the year 1886 at the openworks producing lead ore, ochre, slate, umber, and zinc ore, but exclusive of those producing limestone, paving-stone, road metal, gravel, &c., was as follows:-

Total Number of Persons

		Coun	ty.			Pers employee Openw	d at the		
	Anglesey - Breconshire Cardiganshi Carnarvonsh Denbighshir Flintshire Isle of Man Merionethsh Montgomer	re - nire nire -	-	-			30 4 18 481 113 37 11 313 40		
The output of th	iese openwo	rks in 18	86 wa	as,—					
	Cou	nty.			Statute	e Tons.		e at the works.	
,			LEA	D ORE	1.				
Flintshi	re		-	-		34		£ 238	
		Ochre,	Rotte	NSTONI	E, AND I	Umber.			
Anglese	ey and Isle of	Man -	-	-		3,631		£ 5,669	
		SLAT	E AND	SLABS	(DRESS	ED).			
Denbig Merion	nshire - vonshire -	- - - - -	-	-		89 155 3, 302 2,953 8,220 1,058		£ 112 349 07,045 4,533 19,667 2,130	
	To	tals -	•	-	25	58,777	6	33,836	
,			Zı	NC OR	E.				
Flintsh	ire	-	-	-		195		£ 507	
		Total val	ue	=	- 64	0,2501.			

The output of each individual mine, the per-centage of metal in the ore, and the amount of silver obtainable from the lead ore are given in the "Mineral Statistics of the United Kingdom," published as a separate volume.

#### CHAPTER II.

LIST OF FATAL AND NON-FATAL ACCIDENTS. SUMMARY. COMPARISON WITH THE PREVIOUS ELEVEN YEARS. ACCIDENTS DUE TO BREACHES OF THE ACT OR OF SPECIAL RULES. COMPARISON OF METAL MINES AND SLATE MINES AS REGARDS ACCIDENTS.

In accordance with my usual practice I give a list of all the accidents, fatal and non-fatal, reported to me during the year. I keep the Slate mines separate, so as to be able more easily to study the dangers of workings of this kind.

LIST of the FATAL ACCIDENTS, and Loss of LIFE arising therefrom, and of the Non-FATAL ACCIDENTS causing Serious Personal Injury, or arising from Explosions of Gas, Powder, &c., or of any Steam Boiler in the Copper, Lead, Zinc, and other Mines, exclusive of the Slate Mines, in Dr. C. Le Neve Foster's District during the Year 1886.

Date.	Name of the Mine.	Persons killed or injured.  Names of Persons killed in italics.	Occupation.	Reputed Age.	Length of Time the Person was prevented by the Effects of the Accident from resuming Work.	Cause of Accident, and Bomarks.	No. of Persons killed.	No. of Persons injured.
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#### FALLS OF GROUND.

				[						
1886. Jan. 8	1	Morfa du -	John Roberts -	Miner	 50	1 week		Fall of roof loosened by a blast; he did not think it would fall so soon.	-	1
Feb. 4	7	Frongoch -	George Pickering	,,	 58	11 weeks	•	He was taking down loose ground after blasting, when a piece struck his right arm and broke it.	-	1
March 11	16	Lisburne -	John Lewis -	,,	 45	2 ,,		Fall of loose ground which he was engaged in removing after a blast.	-	1
Nov. 25	67	Foxdale -	Richard Corkill	,,	 3	5 "		Unexpected fall of side while driving a level. Ear cut.	-	1
			01					Total falls of ground	-	4

#### IN SHAFTS.

Overwinding.-None.

Ropes and chains breaking.-None.

#### Whilst ascending or descending by Machinery.

Nov. 10 64 Foxdale Philip Cringle - Shaftman - 25 5½ weeks He stepped into a kibble, hotsted by a compressed air-engine, without waiting for a man to lower him; the kibble dropped 17 fathoms.	Nov.	10	64	Foxdale		•	Philip Cringle -	Shaftman	•	25	5½ weeks	-	ing for a man to lower him; the		1
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# Falling into shaft from Surface.—None.

 $Things falling from \, Surface. -\hbox{None.}$ 

# Falling from part way down.

Feb. 17	12	Van -	•	John Gough -	Miner -	•	20	16 weeks	While working at the bottom of a winze he was suddenly taken with diarrheea, and instead of waiting to be drawn up in the kibble, he climbed up by the timber, but fell just as he reached the top. Skull fractured.	-	1
Mar. 24	22	Foxdale -		W. A. Christian	,, -	•	16	Still unable to work, March 1887.	He went to the shaft without a light, and after getting over the fence fell through a small hole through which the capstan rope had been let down.		1
Oct. 7	59	Pantgwyn-	·	John Jones -	Shaftman	•	50	3 weeks	He was screwing up a flange-bolt when his spanner slipped, and he fell 60 ft. down the shaft into water.	-	1

### Things falling from part way down.

								-
Aug. 16	50	Llain-hir	John Howells -	Miner	24	6 weeks • •	Fall of a stone down the shaft which broke his arm. The kibble was down at the time and the stone must have been lodging somewhere in the shaft.	
Sept. 22	57	Foxdale	Robert Quayle-	Shaftman -	35	4½ weeks -	Fall of a stone from the kibble he was sending up.	

### Miscellaneous in Shafts.-None.

Total in shafts	•	-	 6
Total III biland			

# List of Accidents—continued.

Date.	No. of the Accident.	Name of the Mine.	Persons killed or injured.  Names of Persons killed in <i>italics</i> .	Occupation.	Reputed Age.	Length of Time the Person was prevented by the Effects of the Accident from resuming Work.	Cause of Accident, and Remarks.	No. of Persons killed.	No. of Persons injured.
			·			nderground.			
886. Feb. 26	15	Moelfre	Hugh Owen -	Miner	38	9 weeks	Explosion from boring out a charge of gun-cotton which had missed fire.	_	1
Apr. 3	27	Steeraway	Matthew Groncott	,,	46	3 months	He used too short a slow match for lighting a squib in firing a shot, and it exploded before he had time to get away. Back struck by stones.	-	1
June 7	41	Great Laxey -	Thomas Kelley	,,	50	7 months -	He was firing a hole with a straw, in place of fuse, and used too short a slow match. The charge exploded before he had reached a place of safety, and his leg was badly lacerated.	-	1
	<u>'</u>					Fas.—None.			
				~	·	ater.—None. Water.			
Sept. 13	56	Halkyn	William Jones	Blacksmith -	26		Drowned by the upsetting of a boat in a large underground cavern.	1	-
						nes.—None.			
Dec. 24	72	Great Laxey -	John Callin -	Fan-blower -	19	5 wecks -	Foot bruised by locomotive in adit level.	-	1
				By Machinery i	_	eround.—None.			
April 5	29	Frongoch	Evan Hughes -	Miner	46	10 weeks	Evan Hughes' partner missed striking the drill, and the sledge glanced off the rock, hit his arm and broke it.	-	1
May 13	37	Grogwinion -	Thomas Elias -	,,	28	Incurable	He fell down a pass into which he had been tipping stuff. It is not known how he happened to fall into it. Spine fractured.	-	1
,, 14	<b>3</b> 8	Frongoch	David Lewis -	,,	46	4½ weeks	Fall of four or five yards in some stopes. Head cut, back bruised.	-	1
June 11	43	Bryn-yr-afr -	Richard Jones -	Trammer -	56	6½ weeks	A loose stone lying on a stull fell upon him as he was passing underneath it. Two ribs broken.	-	1
							Total miscellaneous underground.	1	8
				By Machiner Boilers	bursti	FACE. Surface.—None. ng.—None. on Surface.			
Feb. 26	14	Cae Coch -	Richard Williams	Labourer -	35	1 week	A stone detached by frost rolled down	-	1
March 19	18	Lisburne	David Jenkins -	Lead-ore dresser.	15	3 weeks	a steep bank and struck him.  While oiling some machinery, not in motion, fell five or six feet, and in-	-	1
May 18	39	Roman Gravels	Edwin Bennett	Miner	49	32 weeks	He was preparing to cut some timber at the surface, when he slipped and	-	1
July 10	46	Great Laxey -	Edward Watterson.	Carter	41	9 weeks	fell, breaking his leg.  A heavy plank fell on his foot. Ankle hurt.	-	1
Nov. 25	66	Diphwys -	David Owen -	Miner	45	6 weeks	Fall of a heavy stone upon him while making an open cutting.	-	1
				1			Total on surface	-	5
							Gross total for the copper, lead, zinc, and other mines,	1	23

LIST of the FATAL ACCIDENTS, and Loss of LIFE arising therefrom, and of the Non-fatal Accidents causing Serious Personal Injury, or arising from Explosions of Gas, Powder, &c., or of any Steam Boiler, in the Slate Mines in Dr. C. Le Neve Foster's District, during the Year 1885.

Date.	No. of the Accident.	Name of the Mine.	Persons killed or injured. Names of Persons killed in <i>italics</i> .	Occupation.	Reputed Age.	Length of Time the Person was prevented by the Effects of the Accident from resuming Work.	Cause of Accident, and Remarks.	No. of Persons killed.	No. of Persons injured.
				Falls	s of Gre	ound.			
1886. Jan. 11	3	Oakelcy Middle	Robert D. Jones	Rockman .	40	20 weeks -	He went to the working place just after blasting, in spite of his partner's warning; some slate rock loosened by the blast fell and fractured his skull.	-	1
" 14	5	Braichgoch -	Thomas Hum- phreys.	·	27	10 wceks -	A piece of slate rock broke off un- expectedly from the face of the bargain and struck his foot.	10	1
Feb. 5	8	Oakeley Upper -	William Hughes	Labourer	46	Still unable to work, March 1887.	A large stone fell unexpectedly from the side of a pillar 50 ft. above him and struck his leg.	-	1
Mar. 20	20	,, ,, -	David Williams	Rockman	40	2 months -	A small lump of stone fell unex- pectedly from the side of a pillar and struck his leg.	-	1
April 1	25	Maen Offeren -	David Jones -	»,	20	2 wecks	Some rock fell unexpectedly down the face of his bargain and struck his foot.	-	1
,, 2	26	, , ,	Richard Roberts	<b>3*</b>	36		Unexpected fall of rock from the side of a pillar where he had just been blasting.	1	-
" 22	32	Llechwedd -	Edward Mill- ward.	27	41	Leg amputated, still at the hospital, March 1887.	He was prizing down a block of slate, but it fell in a way he did not expect, and broke his leg so badly that it had to be amputated.	-	1
May 21	40	Cwmorthin -	Robert Lewis -	**	32	4 months -	Unexpected fall of roof in a working	_	2
			William Jones -	Miner -	50	4 weeks	place 6 ft. high.		
Aug. 20	51	,,	John Davies -	Rockman	42	5 wecks -	Unexpected fall of rock	-	1
Nov. 4	63	Rhosydd -	Robert Jones -	39	26		Unexpected fall of rock from a pillar, the side of the chamber in which he was working. The men thought the place safe as they had sounded it a few days before the accident.	1	-
Dec. 21	71	Aberllefenny -	John Morgan -	Miner	- 42	2 weeks	Unexpected fall of a stone from the roof of a chamber.	-	1
							Total falls of ground	2	10

# IN SHAFTS.—None. MISCELLANEOUS UNDERGROUND. Explosions of Gunpowder, &c.

Feb.	11	10	Palmerston -	Robert Roberts	Rockman -	31	4 weeks	He was using a brass-tipped stemmer to tamp a charge of gunpowder, when it exploded and burnt his face.	_	1
March	12	17	Maen Offeren -	John Jones -	,, -	42	Still unable to work, March 1887.	Through inadvertence, got in the way of a blast; leg broken.	-	1
31	29	24	Diphwys Casson	Hugh John Jones	Slate-maker -	16		Explosion of 28 lbs. of gupowder. Hugh John Jones was walking	1	3
				Hugh Samuel Jones.	,, -	30	18 weeks	along a level carrying two calico bags, each containing 4 lbs. of gun- powder. He was followed by Hugh		
				Robert Lewis -	Rockman -	29	18 weeks -	Samuel Jones carrying two similar bags, and by Robert Lewis carrying		
				John Griffith -	,, •	22	20 weeks	three similar bags. Hugh John Jones struck a match to light a candle or a pipe; his powder ignited and set fire to the rest. He died two days afterwards, and the men following him were severely burnt. See Chapter III., Prosecutions.		
April	6	30	Oakeley Upper	Lewis Jones -	Miner -	35	4 weeks	Lewis Jones was ramming in tamping with a wooden stick upon a charge	-	2
				Owen Thomas -	,, -	35	5 weeks	of gclatine-dynamite and gun- cotton, when they exploded. Fric- tion of the tightly-fitting gun-cotton against the side of the hole may have caused the explosion, or it may have been due to a blow on the cap.		
Sept.	28	58	,, ,,	John Lewis -		35	-	He was driving a level southwards, and his partner was driving northwards to meet him. The barrier, on the day of the accident, was only 3 or 4 feet across. His partner signalled to him by hammering that he was going to blast, and Lewis replied in the same way. The hole was fired, and broke through the barrier, killing Lewis, who, for some unaccountable reason, had not retired, but had continued going on with his work.	1	-

# REPORTS OF INSPECTORS OF MINES.

# List of Accidents—continued.

Date.  Date.  Name of the Mine.  Names of Persons killed in ital	sons Oecupation.	Length of Time the Person was prevented by the Effects of the Accident from resuming Work.	Cause of Accident, and Remarks.	No. of Persons killed.
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Suffocation by Gases.—None.

Irruptions of Water.—None.

Falling into Water.—None.

On Inclined Planes.—None.

#### By Trams and Tubs.

1886. March 19	19	Oakeley Upper	Griffith Lloyd -	Labourer -	20	8½ weeks	He broke his ankle while endeavour- ing to put back a loaded waggon which had got off the rails.	-	1
April 27	33	Votty & Bowydd	Owen Thomas -	23	35	17½ weeks -	He was unhooking two full trucks which were still in motion, and had his arm squeezed between them.	-	1
Dec. 17	70	Wrysgan -	William Jones -	», —	28	3 weeks	While pushing a waggon round a corner had his hand crushed between the waggon and the rock.	-	1

## By Machinery Underground.

	10 1								
April 3	28	Votty & Bowydd	Owen Evans -	Labourer	- 26	8 weeks	 While lowering a block of slate with a crane let the handle slip; it flew round and struck his forehead.	-	1
28	34	Diphwys Casson	Owen H. Roberts	Rockman	- 27	3 weeks	 While lowering a block of slate with a erane let the handle slip; it flew round and struck him a severe blow on the nose.	-	1
Sept. 8	54	Braichgoch -	David Davies -	Labourer	- 18	6 days	 While lifting a block of slate with a crane let the handle slip; it flew round and struck him on the head.	-	1
Oct. 25	61	Cwmorthin	Griffith Williams	Rockman	52	-	 While lowering a block of slate with a crane let the handle slip; it flew round and struck him on the forehead. One end of the block was already resting on the ground.	1	-

## Sundries Underground.

Jan. 1	1	2	Bryneglwys -	Edward Lewis -	Rockman	- 29	1	ŏ weeks	A stone slipped down a heap of rub- bish and struck his leg.	-	1
'" 1	4	4	Braichgoch -	David Edwards	Miner -	- 33	8	3 days	A stone rolled down a heap of rubbish on to his foot.	-	1
" 1	9	6	Cwmorthin <sup>5</sup>	Robert Williams	Repairer	- 67		3 months -	These two mcn and four others were endeavouring to raise an under-	-	2
				William Jones -	25	- 44		3 months -	ground bridge slightly, but were not doing their work in the right way. One of the chains broke and the six men fell with the bridge to the next floor, a distance of 36 feet. Williams and Jones received severe cuts and bruises.		
Feb.	9	9	Wrysgan -	Robert Parry -	Rockman	- 32	2.	11 weeks -	He was dragging a block of slate by means of the crane, and when it got underneath the crane it somehow turned suddenly and struck him on the leg.	-	1
April	29	35	,,	Thomas Roberts	95	- 38	3	7 weeks	The tip of his crowbar broke as he was prizing up a block of slate, and, falling backwards, he cracked the small bone of his leg.	-	1
May	10	36	Oakeley Upper	William Jones -	Labourer	- 4	0	Still unable to work, March 1887.	He fell down a precipice and broke his leg. The edge of the precipice was fenced, and the man, for some unexplained reason, had climbed over the fence.		1
June	23	44	2, 23	William Roberts	9 9	- 5	52	12½ weeks -	A loose stone rolled down a heap of rubbish and struck him.	-	1
July	13	47	99 . 97	Lewis Jones -	Rockman	- 3	35	2 weeks	Fell down the forebreast of his chamber while walking across the top of it.	-	1
91	21	48	Cwmorthin -	Qwen Lewis - William Davies	Labourer Rockman	- 2	27	6 days	While clearing the fall they were struck by a piece of rock which rolled down the slope.	1	1
55	2	49	· , , , , , , , , , , , , , , , , , , ,	Thomas Roberts	Cartery -	- 5	53	Foot amputated; still unable to work, March 1887.	He was talking to a rockman boring a hole, and through inadvertence fell over the edge of the chamber, Foot amputated.		į,

# List of Accidents—continued.

Date.	No. of the Accident.	Name of the Mine.	Persons killed or injured. Names of Persons killed in <i>italics</i> .	Occupation.	Reputed Age.	i Length of Time the Person was prevented by the Effects of the i Accident from resuming Work.	Cause of Accident, and Remarks.	No. of Persons killed.	No. of Persons injured.
1886. Sept. 3	52	Oakeley Upper	Robert Jones -	Rockman -	40	6 weeks	Fell down the face of his chamber from the breaking of the hole containing the iron peg to which his chain was fixed.	-	1
	<b>5</b> 3	Palmerston -	Evan Jones -	» • •	47	6 weeks	He was startled by a <i>sled</i> coming along the tunnel, while he was opening his chest, and lifting up his head suddenly struck it against the roof and cut it severely.	-	1
" 11	55	Oakeley Middle	Rowland Roberts	" • •	30	Still unable to work, March 1887.	He dislodged some loose rubbish lying on the face of his bargain and fell down it.	- 11	1
(Dec							Total miscellaneous underground	4	27

#### ON SURFACE.

#### By Machinery on Surface.

June 8	42	Wrysgan -	Robert Prit	Quarryman -	20	6 weeks -	He used his foot instead of his hand to turn the reversing wheel of a swing table; the wheel moved suddenly and caught his foot against the frame of the table.	_	1
Nov. 2	62	Llechwedd -	Griffith G Roberts.	Slate-maker -	15	Still unable to work, March 1887.	While making slates with a rotary machine had the top of one of his fingers cut off.		1

#### Boilers bursting.-None.

## Miscellaneous on Surface.

Feb. 16	11	Wrysgan	David Jones -	Tipman -	18	6 weeks	His father was turning over a block of slate, and, though warned, the son did not keep sufficiently clear. Foot struck and hurt.		1
20	13	Aberllefenny -	Robert Owen -	Labourer -	46	4 weeks	He took a sprag out of the wheel of a waggon, when it moved suddenly and struck him.	-	1
March 24	21	Braichgoch -	Edward Evans -	Slate-maker -	16	7 months -	He was riding on a truck with a load of rubbish and fell off; the truck went over his arm and broke it.	-	1
" 26	23	Oakeley Upper -	John Jones -	Carter	50	17 weeks	A piece of stone fell from a loaded waggon on to his leg.	-	1
April 13	31	Rhiwbach -	Robert Davies -	Rockman -	48	Both eyes blinded	little dynamite and 2 lbs. of gun- powder. The powder appears to have got damp, for it made two reports and a fizzing noise between	T	1
¥		,				1 1	them. Thinking all was over Davies returned to the hole, when a third explosion took place, injuring his face and eyes.	10	
June 26	45	Conglog	David Lloyd Roberts.	,,	22		He was riding with several other men on a truck containing slabs; seeing a stone on one of the rails he jumped	1	-
·			1.4	81-11			off and ran in front of the truck to kick it off. Unfortunately he slipped and fell, and the truck struck him so violently that he died in the course of a few hours.		p- Bo
Oct. 8	60	Aberllefenny -	Robert Evans -	Labourer -	69	1 month -	A waggon went off the rails on an incline, and some of the load fell on him.	<del>-</del>	1
Nov. 24	65	Oakeley Upper-	John Tudor Roberts.	Quarryman -	69		Fell over a natural precipice used as a tip close to his working place. See Chapter III., Prosecutions.	1	-
Dec. 14	68	Wrysgan	David Rowlands	Saw sharpener	74	8 days	Fall of about 2 yards from a ladder while helping another man to tighten the bolts of a water-wheel.	-1	1
" 17	69	,, -	James Wynne -	Rockman -	62	7 days -	Slipped on some ice on an incline and hurt his side by the fall.	-	1
							Total on surface	2	10
							Gross totals for the Slate mines -	8	47

The results of these tables are as follows:-

	other I	, Lead, Z Mines, ex e Slate M	clusive	S	late Mine	· ·	Totals for all the Mines.		
Cause of Accident.	Number of separate acci- dents.	of	Number of persons injured.	Number of separate acci- dents.	PCISOES	or	Number of separate acci- dents.	Number	Number of persons injured.
Explosions of fire-damp									
Falls of ground	4		4	11	2	10	15	2	14
In Shafts.									
Overwinding Ropes or chains breaking		_ _ _	<u>-</u>	— — —				_	<u>-</u>
machinery. Falling into shaft from surface Things falling from surface Falling from part way down Things falling from part way down - Miscellaneous in shafts							 3 2 -	, — — —	- 3 2 -
Total in shafts	6		6		_		6		6
MISCELLANEOUS UNDERGROUND.									
Explosions of gunpowder, &c Suffocation by gases Irruptions of water Falling into water On inclined planes By trams and tubs By machinery underground - Sundries underground	$\frac{1}{1}$	1	3   1  4	5 - - 3 4 13	2 - - - 1 1	7 - - 3 3 14	8 — 1 — 4 4 17	2 - 1 - 1 1	10 - - - 4 3 18
Total miscellaneous underground	9	1	8	25	4	27	34	5	35
On Surface.									
By machinery on surface Boilers bursting Miscellaneous on surface	- - - 5		5	$\frac{2}{10}$		$\frac{2}{8}$	$\begin{array}{ c c }\hline 2\\\hline 15\\\hline \end{array}$	$-\frac{1}{2}$	$\frac{2}{13}$
Total on surface	5	_	5	12	2	10	17	2	15
Gross total	- 24	1	23	48	8	47	72	9	70

The total number of accidents reported is one more than in 1885; there is a decrease of 10 in the number of persons killed, and an increase of 12 in the number of persons injured.

The causes of fatal accidents in 1886 may be compared with those of the 11 previous years by the following table:—

GENERAL TABLE OF FATAL ACCIDENTS AND DEATHS AT THE MINES IN DR. C. LE NEVE FOSTER'S DISTRICT FROM 1875\* TO 1886.

	Number of Fa	tal Accident	ts.	Number of I ther	Deaths resultefrom.	ting
	Totals for the 10 years 1875 to 1884.	1885.	1886.	Totals for the 10 years 1875 to 1884.	1885.	1886.
Falls of ground	42	8	2	46	9	2
In Shafts.						
Overwinding Ropes and chains breaking -	1 1	_	_	$\frac{1}{2}$	_	_
Whilst ascending or descending by machinery	$\frac{2}{2}$			$\frac{2}{2}$	_	_
Falling into shaft from surface - Things falling from surface - Falling from part way down -	$\frac{2}{19}$		_	$\frac{2}{19}$	_	=
Things falling from part way down	7	1		7	1	1=
Miscellaneous in shafts -						
Total in shafts	32	1	<u> </u>	33	1	
Miscellaneous Underground.			1			
Explosions of gunpowder, &c	31	_	2	35	<u> </u>	2
Suffocation by gases		<u> </u>		_	3	
Irruptions of water Falling into water	_		1	-	_	1
On inclined planes	<u></u>	1		<u> </u>	1	_
By trams and tubs By machinery underground	3 36	1	1	4 37	1 1	1
Total miscellaneous -	71	4	5	77	6	5
On Surface.						
By machinery on surface -	13	2	_	13	2	_
Boilers bursting Miscellaneous on surface -	1 19	1	$\frac{1}{2}$	21	1	
Total on surface	33	3	2	38	3	2
Gross total	178	16	9	194	19	9

<sup>\*</sup> In 1873 and 1874 the accidents in slate mines were not included, and for that reason the statistics for those years are not added to the table.

Few of the accidents call for any special remark. At the metal mines proper none were due to infringements of the Act, and the only one which was attended with a fatal result was caused by foolhardiness. A huge underground cavern had been discovered at Halkyn mine, and the agent made use of a small boat to explore it. After he went away a blacksmith, who, I am told, had never been in a boat before, jumped in out of pure curiosity, and when a little way from the shore of the underground pond foolishly stood up in his frail craft, which capsized and he was drowned.

At the slate mines there were as usual numerous accidents from falls of ground, and, as I have already pointed out on more than one occasion, casualties of this kind are inseparable from the method of working adopted. The worst accident arose from an explosion of gunpowder carried in calico bags, which caused the death of a lad and severe injuries to three men. An account of the prosecution consequent upon this breach of the Act is given in the next chapter, which also contains the result of the proceedings taken against the cwners and agents of the Oakeley mines with reference to the death of an aged quarryman, killed by falling over a precipice close to his working place.

The following tables are given, as usual, for the purpose of affording a comparison between the dangers of slate mines and those of other mines:—

TABLE showing the DEATH-RATE FROM ACCIDENTS at the MINES in Dr. C. LE Neve Foster's District.

-	Persons employed.			Numbe	er of Deaths Accidents.	from	Number of Persons	Death-rate from Accidents per 1,000 Persons employed.			
Year.	Under- ground.	Above Ground.	Total.	Under- ground.	Above Ground.	Total.	for One Death by Accident.	Death by Unde	Under- ground.	Above Ground.	Total.

# COPPER, LEAD, ZINC, and other MINES, exclusive of the Slate Mines.

*Averages for the 10 years 1875 1884.	4,684	3,002	7,686	8.4	1.2	9.6	800	1.79	0.40	1.24
1885	2,322	1,653	3,975	8	1	9	441	3.44	0.60	2 · 26
1886	2,634	1,882	4,516	1	-	1	4,516	0.37		0.22

#### SLATE MINES.

*Averages for the 10 years 1875 to 1884.	2,248	2,481	4,729	7.2	2.6	9.8	482	3.20	1.04	2.07
1885	2,404	2,414	4,818	8	2	10	481	3.32	0.82	2.07
1886	2,263	2,361	4,624	6	2	8	578	2.65	0.84	1.73

### TOTALS for all the MINES.

*Averages for the 10 years 1875 to 1884.	6,932	5,483	12,415	15.6	3.8	19.4	640	2.25	0.69	1.56
1885	4,726	4,067	8,793	16	3	19	462	3.38	0.73	2.16
1886	4,897	4,243	9,140	7	2	9	1,015	1.42	0.47	0.98

<sup>\*</sup> The details for each of the 10 years will be found in the "Reports of the Inspectors of Mines for the year 1884," p. 206.

These tables show that at the metal mines proper the very low death-rate last year counterbalances the high figure of 1885, and I wish to give agents and men every credit for the fact that only one person was killed, and that he met with his death through his own rashness, in a manner wholly unconnected with the dangers of his calling.

At the slate mines there is a slight improvement compared with 1885.

On the whole, 1886 was an unusually favourable year as regards immunity from accidents in my district,

CHAPTER III.—PROSECUTIONS: BARMOUTH, BENALLT, BRYNFELIN, DIPHWYS CASSON, GREAT MANOD, RUSHEN, SNOWDON, AND WRYSGAN MINES .- BUGAIL AND OAKELEY UPPER MINES.

I received official instructions to take legal proceedings in eight cases last year; the particulars are set forth below:—

Name and Description of Mine.	Name and Description of Offender.	Nature of Offence.	Result of Hearing.	Penalty.	Costs.
Barmouth (Manganese)  ""  Benallt (Manganese)  Brynfelin (Copper)  Diphwys Casson (Slate)  Great Manod (Lead)  Rushen (Lead)  Snowdon (Copper)  Wrysgan (Slate)  "" "" "" "" "" ""	John Abraham, owner  ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Breach of section 28 Breach of 38 & 39 Vict. c. 39. s. 1. 4 breaches of section 23 (7). Breach of section 28 - 10 breaches of section 13  Breach of section 23 (2) b. """ Breach of section 23 (1) """ Breach of section 23 (1) """ Breach of section 23 (1) """  Breach of section 23 (2) b. """  Breach of section 23 (2) b. """  Breach of section 23 (3) b. """  Breach of section 23 (4) b. """  Breach of section 23 (5) b. """  Breach of section 23 (6) b. """  Breach of section 23 (7)  Breach of section 23 (8) b. """  Breach of section 23 (9) b. """  Breach of section 23 (1) b. """  Breach of section 23 (2) b.	Conviction  ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1 0 0	£ s. d. 2 12 0  } 4 12 6 3 15 0  No costs allowed. 1 1 0 0 7 10 No costs allowed. 4 4 0 - 1 13 1 - 0 12 6
		Total fines and cos	ts -	20 15 0	20 6 9

Barmouth.—Mr. Abraham's neglect consisted in having omitted to send me an annual return and to post up an Abstract of the Act.

Benallt.—Mr. Fagan was carrying on mining work without any regard to the provisions of the law, and I thought it important in this as in the previous case to call the attention of other mine owners in the district to the requirements of the Act by means of a prosecution.

Brynfelin.—On the 14th July last I sent Mr. Banner notice in writing to fence the tops of ten disused mine-shafts which had been reported to the Home Office by the Chief Constable of Carnarvonshire as being dangerous. Finding on the 31st August that there were no signs of any disposition on Mr. Banner's part to comply with my notice, I informed you of his neglect and received your instructions to prosecute him,

At the hearing of the case his solicitor produced evidence to show that he was making preparations to fence the shafts before my report was sent to you, and, although he ought to have fenced the most dangerous shafts several years ago without any notice at all from me, the magistrates refused to convict him. Still, as he had to pay the costs, he did not escape entirely unpunished.

Diphwys Casson.—In spite of the conviction of the managers of two neighbouring mines for similar offences, the agent of Diphwys Casson allowed gunpowder to be carried underground in calico bags, and the consequence of his imprudent breach of the law was a fatal accident, of which I have already given particulars.

When the summons was heard at Penrhyndeudraeth, the solicitor for the defendants contended that, as the Act simply prescribed that gunpowder was to be taken into the mine in "a case or canister," without defining the nature of the case, his clients had not committed any offence; in other words, he argued that a calico bag was a "case" within the meaning of the Act. My advocate pointed out that the word "case" had to be construed with due regard to the purpose for which it was used, and asked that a reasonable and ordinary meaning should be put upon it consistent with the context of the Act. justices dismissed the summons, but consented to state a case for a superior court.

The appeal was heard last January in the Queen's Bench Division of the High Court of

Justice before Lord Coleridge, Lord Chief Justice, and Mr. Justice Grove.

The following report of the judgment is taken from "The Times," 21st January 1887.

Lord Coleridge said he was of opinion that the decision of the magistrates was wrong, and that they ought to have convicted. The question put in the case must be answered in the contrary way to that in which the magistrates had decided it, and they had decided it wrongly. He was clearly of opinion that a linen or cotton bag was not a "case" within the meaning of this Act. The object of the rules and requirements of the Act was to protect human life and to prevent danger of explosion. It was to give effect to true rules of construction to hold that the words "case" or "canister" explained one another, and that "case" meant something in the nature of a canister, something solid and substantial, and fitted to resist ignition from a spark or other accidental cause, because that was the object of the Act, and in so construing the terms of the Act they were construing it according to its object. He was clearly of opinion that the magistrates were wrong in holding that a linen or cotton bag could be within the Act, and that they ought to have convicted and must proceed to convict the defendants.

Mr. Justice Grove entirely concurred. It would never, he said, have occurred to his mind that a "case" meant a bag. If "case" might mean a linen or cotton bag, it might mean a paper bag or a handkerchief—which would be liable to the most imminent danger of explosion from a spark, especially such hard, sharp sparks as emanated from the workings of mines. To construe the words otherwise would be to construe them contrary to the whole object of the Act, and the plain meaning to be derived from the context in which the words were used. There were no words which might not, by taking them out of their context, be made to mean the direct contrary of what was intended. And the whole object of the Act would be defeated and destroyed by that mode of construction. The true question was: What was the sense in which the words were used in this Act? He was clearly of opinion that the word "case" meant in this Act something hard and solid in its nature, which would prevent the danger of ignition by an accidental spark—as a "case"

or canister" in that sense would, but a cotton bag would not.

The case was therefore sent back to the magistrates to convict. They then imposed fines of 2s. 6d. and refused to allow costs; but as the defendants had to pay the costs of the appeal in London, they were in reality heavily mulcted for the fatal breach of the law.

Great Manod.—On visiting this mine in November 1885 I found a calico bag containing 3 lbs. of gunpowder lying upon a partly burnt candle.

Rushen.—In 1885 the owner of this mine was fined 1l. for not providing adequate ventilation. When visiting the mine last year I found men working in some stopes where my candle went out completely when I held it upright. The agent admitted to me that the men had been working for three weeks in this noxious atmosphere.

Snowdon.—On the 20th June 1885 I sent a notice to the agent of the lessor, the Dowager Lady Williams Bulkeley, begging him to fence three pits. Lady Bulkeley's solicitors replied, "We will see that the matter is duly attended to." On the 5th July 1885 I had an interview with Mr. Bunn, the lessee, and he also promised that fences should be erected.

On the 21st April 1886 nothing had been done; however, as soon as legal proceedings were commenced, Lady Bulkeley's agent set men to work in earnest and the pits were speedily fenced. They are all close to one of the most frequented paths up Snowdon, and one of them, a huge chasm, was specially dangerous to tourists.

Wrysgan.—In December 1884 I found gunpowder being taken into the mine in calico bags. I at once gave the company notice in writing to abandon this practice and the secretary promised immediate attention. Finding in November 1885 that the use of the calico bag had not been entirely discontinued, it seemed to me desirable to enforce the law by a prosecution.

In July 1885 I gave the company notice in writing to fence a dangerous underground travelling road in three places; after the lapse of more than four months two of the places

were still unfenced.

In addition to these eight prosecutions I may mention two others which related to events that took place in 1886, but which do not appear in my list as the summonses were not heard till this year.

Bugail.—On the 1st October last I met a lad carrying 4 lbs. of gunpowder in a calico bag into the underground workings, and a few weeks afterwards 1 found that gunpowder was conveyed underground in a canister containing 8 or 9 lbs. In spite of two copies of the Abstract of the Act being posted up on the premises, and of my notices in writing that only 4-lb. canisters should be used, the agent professed ignorance of the

gunpowder regulations. The company and agent were convicted, and each had to pay 3l. 3s. 11d. in fines and costs.

Oakeley Upper.—An elderly quarryman, named John Tudor Roberts, was allowed to make slates within a few feet of a high natural precipice over which rubbish was tipped. In some unexplained manner he fell over and was killed. I reported the matter to you, and pointed out that if there had been a fence the man's life might have been saved; but I expressed some doubt whether there was a sufficiently clear breach of the Special Rules to make a prosecution desirable. The Rules say that, "every dangerous pathway or road in the mine" is to be "securely fenced."

Acting under your instructions I prosecuted the company, managing director, and resident The question before the Bench was simply this: "Is the edge of a high and precipitous 'tip,' where two lines of rails terminate, 'a dangerous pathway or road.'" The justices dismissed the summons; but as they refused to allow the defendants any costs, and said that I was fully justified in bringing the case before them, I had no reason to be

dissatisfied with their decision.

I believe that the prosecution will have a good effect in showing the public that where there is a semblance of an accident having been caused by a breach of an official regulation, the matter will not be allowed to pass unnoticed by the Government.

Mr. James S. Gell of Castletown, Isle of Man, acted as my advocate in the Rushen case, and all the other prosecutions were conducted by Mr. J. P. Cartwright, solicitor, of Chester.

The widows of the three men drowned by an irruption of water at Pantgwyn mine in 1885 have each received 87. 10s. from the fines inflicted by the magistrates, and the sum of 141. 10s. remains deposited in the Post Office Savings Bank,

# CHAPTER IV.—GENERAL REMARKS.

EXEMPTIONS UNDER THE SLATE MINES (GUNPOWDER) ACT. SPECIAL RULES. ABANDONED MINES. PLANS. NEW MINES. MANGANESE MINING IN MERIONETHSHIRE. VENTILATION. BARRACKS FOR WORKMEN. CRANE ACCIDENTS. IMPROPER CONVEYANCE AND THAWING OF DYNAMITE. SUMMARY OF WORK.

In accordance with section 2 (4) of the Slate Mines (Gunpowder) Act, 1882, I have the honour to report that there are now three slate mines holding exemptions from section 23 (2) (a), (b), (c), and (e) of the Metalliferous Mines Regulation Act, 1872, viz., Aberllefenny, Llechwedd, and Oakeley; under this latter name are included the Oakeley Middle and Oakeley Upper of former lists, now amalgamated into one mine. The new code of Special Rules established at the Oakeley mines in 1883 was adopted at Aberllefenny and Llechwedd when the exemptions were granted.

Special Rules are also in force at the following mines:-

Rules established in 1876. See Report of H.M. Inspectors of Mines for 1876, p. 360.

Rules established 9 July 1878. See Report of H.M. Inspectors of Mines Tan-y-bwlch,

for 1878, p. 463.

Braichgoch, Bryneglwys, Bugail, Bwlch-y-Slater, Carlyle, Crown, Cwmorthin, Cymerau, Diphwys Casson, Gaewern, Maengwynedd, Moelferna, New Conglog, Palmerston, Park, Penarth, Ratgoed, Rhiwbach, Rhosydd, Voelgron, Votty and Bowydd, Wrysgan. See Report of H.M. Inspectors of Mines for 1878, p. 460. One rule at Maen Offeren slate mine is slightly different, as will be seen by reference to the same report, p. 462,

Additional Special Rules were established at Bryneglwys in June 1882.

On the 29th January last special rules were established at the Artro, Diphwys, Hafotty, Harlech and Moelfre manganese mines, which belong to the Dyffryn Mining Company.

I have removed from my list the names of the following mines, which have been abandoned:—

Cardiganshire.—Mynydd Gorddu. Carnarvonshire.—Ellen, Rheuadrwst.

Denbighshire.—Great New Westminster, Llandegla, Plas du and Park.

Flintshire.—Dafarn Dywyll, Dyserth Castle and Gop, Pennant, Queen of the Mountain,

Merionethshire.—Pioneer, Tyddyngwladis.

Montgomeryshire.—Cwmgwnen, Middletown Hill, Moelfre, North and South Llangynog.

Shropshire.—Crickheath. Isle of Man.-Kirkmichael, The plan and section of Mynydd Gorddu mine are at the Home Office, and plans of Pennant and Kirkmichael mines ought to be supplied. The others were all small mines not ordinarily employing 12 persons below ground.

Considering the state of the metal market, my district may be congratulated upon the

number of new mines started or of old mines revived in 1886, viz.:—

Cardiganshire.—Bwlchgywn, Cwmbrwyno, Kingside, Llwynteify, Penrhiw and Ystumtuen, Talybont, Temple, Tyllwyd and Gelli-arian.

Carnarvonshire.—Aberllyn, Benallt, Gorlanfarchog, Rhiw. Denbighshire.—Nant-y-plwm, True Blue, Westminster.

Flintshire.—Hopeful, West Halkin.

Merionetheshire.—Artro, Crafnant, Cwm Mynach, Diphwys, Graig ucha, Lletty Walter, Mynydd Llanbedr, Penisarcwm.

Montgomeryshire.—Penclyn.

The most important mining event in my district last year has been the working of a deposit of carbonate and silicate of manganese near Barmouth and Harlech, in Merionethshire. The ore occurs in the form of a bed or seam, interstratified among rocks of Cambrian age, and varying from a few inches to three or four feet in thickness; the average thickness is 12 to 18 inches. The per-centage of metallic manganese varies from 20 to 32, and the ore is sent to Mostyn and Darwen for the manufacture of spiegeleisen and ferromanganese. The quantity of ore produced in 1886 amounted to 11,256 tons, worth 7,897l., and the output for this year will probably be very much greater. It is gratifying to me to record the birth of a new mining industry, and to be able to state that the bed has been traced over a considerable area, and that the existence of large stores of the novel kind of ore has been proved beyond doubt.

Ventilation.—In my last report I dwelt at some length upon the subject of ventilation, and my experience of this year confirms my opinion that it will be impossible for me to secure a thoroughly sufficient air supply in all working places unless the first general rule is made more definite and stringent.

Barracks for workmen.—The reply often made to me when I complain of bad ventilation in a stuffy rise or end is: "The air here is nothing like so bad as you would find it in the men's bedrooms." I have therefore taken the opportunity of examining some of the barracks, where men whose homes are distant find it convenient to live from the Monday to the Saturday. There are undoubtedly cases of overcrowding, and I thought it my duty to call the attention of Mr. Hugh Rees, medical officer of health for the district, to the barracks at Rhosydd quarry, at the head of an out-of-the-way valley near Festiniog. He agreed with me that it was not right that there should be scarcely 200 cubic feet of space per man in rooms used for sleeping, taking meals, and keeping provisions and coal. I have left the matter in his hands. The men were pearly all sleeping two in a bed, and some of the rooms were dark, with a bad floor and an indifferent roof.

While blaming the Rhosydd Company for the manner in which they have been housing their men, I must not fail to mention an instance of an opposite kind. At some barracks built by Mr. Dunlop for the Oakeley quarries, each man has his own sleeping room, separate from a central refectory; and there is an air of comfort and decency which contrasts favourably with the untidy and dirty appearance of the rooms at Rhosydd. These barracks are more in accordance with my ideas of what is due from an employer to his workmen.

Prevention of Crane Accidents.—My list shows one fatal and three non-fatal accidents with cranes, and in 1885 the number of casualties was greater. As a rule, these accidents happen while lowering blocks, when a pawl cannot be used. The man sometimes loosens his hold too soon, thinking that a block which has reached the ground is resting firmly, instead of which the block lurches a little, and a slight movement of the chain, multiplied by the gearing, causes the crane-handle to fly round violently and inflict a severe or fatal blow. In order to prevent these accidents, Mr. Edward Hughes, of Maentwrog, proposes to drive the barrel by a worm, and so prevent any unintentional movement of the crane. Though there is a certain loss of speed, this is compensated by gain in safety and in power, and the invention deserves the attention of quarry owners.

Conveyance and thawing of Dynamite, &c.—I frequently have to complain of dynamite and similar explosives being taken underground without any proper substantial case. A paper box is considered sufficient by many miners; and I have seen dynamite stowed away in a worn-out shoe and in an old teapot. I fear I shall not be able to enforce the use of secure cases until some of the managers have been prosecuted.

Irregular and dangerous methods of thawing dynamite are often resorted o instead of using proper warming pans. Three men were slightly injured at Roman Gravels mine last January from the explosion of some dynamite remaining in a can of water in which they had been heating their cartridges; and a few weeks ago I myself discovered dynamite being heated in a tin over a lighted candle. It is true that in this case the tin containing the cartridges was placed in another full of water: but if either receptacle had leaked—and no one can vouch for the staunchness of an old and battered meat-tin—an explosion would very likely have occurred. Mr. H. S. Lancaster, the manager of the mine, prosecuted the work—man under one of his Special Rules, and the man was convicted. As it was the first offence, Mr. Lancaster asked for a mere nominal penalty, and the fine inflicted was only 1s.

This prosecution will do good in the immediate neighbourhood; and the attention of mine agents generally has been called to the danger of irregular methods of thawing dynamite through circulars distributed by Nobel's Explosives Company. On the other hand, I have found statements in the instructions for using dynamite, issued by another company with each package of the explosive, so calculated to mislead agents and men with regard to its freedom from danger that I have pointed them out to Her Majesty's Chief Inspector of

Explosives, in the hope that he will be able to prevent their being repeated.

During the year 1886 I travelled 8,807 miles while engaged upon my official duties, viz., 7,450 by rail, 1,157 by road, and 200 by sea. I made 223 visits to mines, of which 114 included underground as well as surface inspection. Most of these visits were made without notice. Official work in London occupied me 33 days.

I have, &c.,
(Signed) C. LE NEVE FOSTER,
H.M. Inspector of Mines.

The Right Hon. Henry Matthews, Q.C., M.P., Her Majesty's Principal Secretary of State, Home Department, Whitehall, London.

List of Owners, Mines, and Agents, under the Metalliferous Mines Regulation Act, in North Wales, Part of South Wales, Shropshire, and the Isle of Man.

	Name of Mine.			employe	ordinarily d during r 1886.
Owner or Company, and Postal Address.	Italics denote Mines suspended during the whole of 1886, but not abandoned.	Situation.	${f A}$ gent.	Be low Ground.	Above Ground.
				O TO GENERAL	Ground.
	ANGLES	EY.			
T. Fanning Evans, Almwch	Mona Morfa du	Amlwch Ditto	T. Fanning Evans -	16 8	74
Ditto	Parys	Ditto	Ditto	1	21
			Total	25	97
	)	ı		1	
	BRECONSI	HIRE.			
Nant-y-Garw Co., Address C. W. Seccombe, Gunnislake, Tavistock.	Nant-y-Garw -	Llanwrthwl -	Henry Phillips -	15	2
	CARDIGAN	SHIRE.			
C. O. Rogers, 10, Blomfield Street, London, E.C.	Blaen Caelan -	Talybont	_	-	-
Blaen United Mining Co., Ltd., 4, New Broad Street, London, E.C.	Blaen United -	Llanfihangel, Lower	_	_	_
John Jenkins, Peter Jones, and G. Jones, Bronfloyd Mine, Bow Street, R.S.O., Cardiganshire.	Bronfloyd -	Penrhyncoch -	Peter Jones -	12	_
Edward Bennett, Tavistock Lodge, Harlesden, London, N.W.	Brynarian -	Taliesin	George J. Gray -	2	_
Evan Reese, Bank Place, Machynlleth Bryn-yr-Afr Mine Co., Ltd., 15, Lord Street Liverpool.	Bryn Dyfi - Bryn-yr-Afr -	Glandovey - Seven miles from Talybont.	Evan Reese - J. Phillips -	23	27
Cardigan United Mines, Ltd., Aberystwith -	Bwlchgwyn and	Ponterwyd -	A. Williams -	4	5
James McIlquham & Co., Aberystwith -	Llwynteify.  Bwlch United -  (including Pen- craigddu and	Goginan, Aberyst-with.	William Northey -	—	_
Caelan and Cefngwyn United Mining Co., Ltd., J. Basil Masefield (sec.), Ledbury,	Caenant.) Cefngwyn -	Elerch, near Taly- bont.	_	_	1
Herefordshire, and Ynysfaig, Dolgelly. C. O. Rogers, 10, Bloomfield Street, London, E.C.	Court Grange -	Near Aberystwith -	_	_	
Crown Mining Co., W. J. Lavington, Secretary, Dashwood House, New Broad Street, London, E.C.	Crown	Ponterwyd -	David Daniel -	3	_
Cardigan United Mines, Ltd., Aberystwith - W. Sadler, 105, Bow Road, Mile End, London, E.	Cwmbrwyno - Cwmerfyn -	Cwmbrwyno - Llanbadarn Fawr -	A. H. Jenks - J. H. Roberts -	8 8	10 2
Cwmystwyth Co., Ltd., John Taylor and Sons, 6, Queen Street Place, London, E.C.	Cwmystwyth -	Cwmystwyth, near Devil's Bridge.	Jos. B. Rowse -	57	46
Dolclettwr and Llain-hir Copper and Lead Mining Cc., Ltd., 92, West Regent Street, Glasgow.	Dolclettwr and Llaiu-hir.	Taliesin	J. H. Clint -	12	6
John Taylor and Sons, 6, Queen Street Place, London, E.C.	East Darren -	Goginan, Aberyst- with.	Thos. Garland -	24	35
Erglodd Únited Mines Co., Ltd., in liquidation, Thomas Williams, Liquidator, 40, North Parade, Aberystwith.	Erglodd United -	Talybont	_	_	
Cambrian Mining Co., Ltd., Pinner's Hall, Old Broad Street, London, E.C.	Esgairfraith (or Cambrian.)	Talybont	Henry James -	9	7
Esgair-hir Mining Co., Ltd., Pinner's Hall, Old Broad Street, London, E.C.	Esgair-hir (work recommenced March	Talybont	Henry James -	_	_
P. Baker, Bute Dock Chambers. Cardiff. and James McIlquham, Aberystwith.	1887.) Esgairmwyn and Ddu. (Stopped March 1885.)	Strata Florida -	_	_	_
R. Attenborough, 2, Whitley Grove, Reading John Kitto and Son, Llanidlocs	Florida Frongoch	Ditto Devil's Bridge -	R. Crouch - John Kitto and Son.	9 54	10 68
Goginan Realization Co., Ltd., John Kitto and Son, Llanidloes. P. Baker, Bute Dock Chambers, Cardiff	Goginan Great Darren -	Seven miles from Aberystwith. Goginan, Aberyst-	Ditto William Jones -	8	13
West Esgair Lle Mining Co., A. E. Wenham, Secretary, 114, Colmore Row, Birmingham.	Great West Van -	with. Ponterwyd -	A. E. Wenham		_

LIST of Owners, Mines, and Agents, under the Metalliferous Mines Regulation Act, in North Wales, Part of South Wales, Shropshire, and the Isle of Man—cont.

Owner or Company, and Postal Address.	Name of Mine.  Italics denote Mines suspended during	Situation.	Agent.	employe	ordinarily d during ar 1886.
**e	the whole of 1886, but not abandoned.			Below Ground.	Above Ground.
	CARDIGANSH	IRE—cont			
Grogwinion Consolidated Mining Co., Ltd.,	Grogwinion	Pontrhydygroes -	John Kitto and	2	4
John Kitto and Son, Llanidloes.  The Kingside Mining Co., Ltd., 5, Queen Street Place, London, E.C.	Kingside (Started January	Cwmystwyth -	Son. J. B. Rowse -	-	—
John Taylor and Sons, 6, Queen Street Place, London, E.C.	1887.) Lisburne	Yspytty Ystwith, Pontrhydygroes.	Peter Garland -	54	59
Mynach Vale Mining Co., Ltd., 15, Lord	Mynach Vale -	Devil's Bridge -	J. Phillips	4	1
Street, Liverpool.  George Green, 'The Foundry, Aberystwitn, and T. S. G. Kirkpatrick.	Nantycria	Ponterwyd -	Richard Jones -	4	_
Grogwinion Consolidated Lead Mine Co., Ltd, John Kitto and Son, Llanidloes.	North Grogwinion	Pontrhydygroes -	John Kitto and Son.	_	
Penrhiw and Ystumtuen Mines Co., c/o George Green, Foundry Aberystwith.	Penrhiw and Ystumtuen.	Ponterwyd -	Ponterwyd	4	
W. Thomas, Mid Wales Villa, Llanidloes - Powell Mines Co., Ltd., Goginan, Aberystwith.	Plynlimmon - Powell	Ponterwyd - Ditto -	W. Thomas N. Bray	8	5
J. Kitto, Llanidloes Vere Powys, 1, Lincoln's Inn Fields, London,	Red Rock Rheidol United -	Near Crosswood - Cwm Rheidol -	John Kitto - D. Lambert -	1 10	10
W.C. Silver Brook Mining Co., Ltd., F. E. Briggs, Secretary, 22, Royal Exchange, Leeds.	Silver Brook (Formerly Silver	Goginan	William Jones -	_	_
South Darren Mining Co., Ltd., J. H. Murchison, Secretary, 8, Austin Friars,	Stream.) South Darren	Goginan, Aberyst-with.	John Mitehell -	30	31
London, E.C. Talybont Silver Lead Mining Co., Talybont Glandovey, R.S.O.	Talybont (Formerly Allt-y-crib and North	Talybont	A. H. Jenks -	30	13
Henry Mallory, 44, High Street, Warwick - Cardigan United Mines, Ltd., Aberystwith - Cardigan United Mines, Ltd., Aberystwith -	Cardigan.) Tanyrallt Temple Tyllwyd and Gelli- reinin.	Talybont Devil's Bridge - Cwm Rheidol -	J. Davies A. H. Jenks - Ditto -	7 16 10	- <sub>1</sub>
J. Phillips and N. Bray, Goginan, R.S.O.,	Tyn-y-Fron -	Cwm Rheidol -	J. Phillips.	-	_
Cardiganshire. Vaughan Mines Co., Ltd., in liquidation, Charles Hurlbatt, Liquidator, 6, Queen's	Vaughan	Near Goginan, Aberystwith.	T. Garland.	_	-
Street Place, London, E.C. Wemyss Mines, Limited, Dinas, Aberystwith -	Wemyss	Cwmnewyddion, near Devil's Bridge.	W. Michell -	6	7
G. Williams, Trefechan Saw Mills, Aberystwith.	West Egair Lle	Ponterwyd	A. E. Wenham -	15	3
Ystrad Einion Mining Co., Adam Mason, Horwich, Bolton.	Ystrad Einion -	Glandovey	Thomas Thompson		1
			Totals	437	379
	1		1	1	I
	CARNARVO	NSHIRE.			
W. Jones & Co., Mount Pleasant, Bettws-y-		Bettws-y-coed -	W. Jones -	1	1 —
coed. L. D. Bunn, Dawlish	Arran and Snow-	Beddgelert	_	_	_
Isaac Roberts and Owen Williams, Rhiw,	don (formerly Maudslay.) Benallt	Rhiw	Isaac Roberts -	1	1
Sarn, Pwllheli. Thos. Green, Bridge Gate House, Chester	Braich-yr-oen -	Cwm Llan, Beddge-	W. E. Parry -	_	_
R. and T. Cartwright, 10, Bridge Street,	Bryneisteddfod -	lert. Parish of Bettws-	T. Cartwright -	3	_
Chester. William Veitch, Trefriw, R.S.O. Carnarvonshire Great Consols Lead Mining Co., Ltd., 85, Gracechurch Street, London,	Cae Coch Carnarvon Great Consols.	y-coed. Trefriw Llanrwst	W. Veitch W. H. Borlase.	74	29
E.C. Coed Mawr Pool and Fridd Lead Mining Co., Ltd., H. V. Taylor, Secretary, 91, Finsbury	Coedmawr Pool and Fridd.	Bettws-y-coed -	William Heard -	_	
Pavement, London, E.C.  Conway Valley Freehold Copper Mining Co., Ltd., Albion Bank and Discount Co., Ltd., Sheffield Buildings, 89, Victoria Street,	Conway Valley -	Conway		_	+
Liverpool.  Cwm Dwyfor Mining Co., Ltd., George J.  Gray, Secretary, St. Clement's House,  Clement's Lane, London, E.C.	Cwm Dwyfor -	Pennant Valley, near Rhyd ddu.	Geo. J. Gray.	-	_
Owen Evans, Fridd, Llanrwst  Daugoch Mining Co., Ltd., Abersoch, near Pwllheli.	Cyffty Daugoch	Llanrwst Abersoeh	Owen Evans. Geo. F. Pearson.	_2	3 —
	$\mathbf{C}$	2			

LIST of OWNERS, MINES, and AGENTS, under the METALLIFEROUS MINES REGULATION ACT, in North Wales, Part of South Wales, Shropshire, and the Isle of Man—cont.

Owner or Company, and Postal Address.	Name of Mine.  Italics denote Mines	Situation.	$\mathbf{A}\mathbf{gent}.$	Persons of employed the year	d during
	suspended during the whole of 1886, but not abandoned.	*		Below Ground.	Above Ground.
	CARNARVONS	HRE—cont.			
D'Eresby Mountain Lead Mining Co., Ltd., Llanrwst, and Gracechurch Buildings,	D'Eresby Moun-	Llanrwst	John Roberts -	26	13
London, E.C. Drws-y-Coed Copper Mining Co., Ltd.,	Drws-y-Coed -	Nantlle Vale -	T. S. Allison -	_	2
Pen-y-grocs, R.S.O. Executors of Geo. Beckingsale, C. Gregory, 81, Bishopsgate Street Within, London,	East Wheal George	Llanrwst.	_	-	
E.C. The representatives of the late Alexander Cork King, and the mortgagee Edward Bridges. Address: Messrs. Snowball	Glyn	Capel Curig.			
Smith & Co., 5, Crosshall Street, Liverpool. Goddard's Mining Co., Ltd., E. Beazley, 6 and 7, Coleman Street, London, E.C.	Goddard's -	Llanrwst.	_	-	
Thomas Evans, Aberllyn, Bettws-y-coed - Hafna Mining and Smelting Co., Llanrwst -	Gorlanfarchog - Hafna and Great	Llanrwst Llanrwst	Thomas Evans - H. Wolff	3	4
Llangelynin Mining Syndicate, R. T. Ellis, Trefriw, R.S.O.	D'Eresby. Llangelynin -	Conway	R. T. Ellis -	3	_
North D'Eresby Mountain Lead Co., Ltd., E. Beazley, 6 and 7, Coleman Street,	North D'Eresby -	Trefriw.		-	a
London, E.C. Pantgwyn Mining Company, Abersoch, Pwll.	Pantgwyn	Abersoch, Pwll-	John Craze -	56	52
heli. Laura Jones and James Fagan, Bryncelyn House, Nantlle Vale, Pen-y-groes, R.S.O.	Rhiw	Rhiw	James Fagan -	2	1
Standard Lead Mine, Ltd., Llanrwst J. W. Gwynne Hughes, Tregil, Llandilo -	Standard Symddeddulluan (formerly Car-	Ditto Nantlle Vale -	W. H. Borlase -	28 —	20 1
Tan-y-bwlch and Bwlch-y-tocyn Mining Co., Ltd., Abersoch, near Pwllheli.	narvon Copper). Tan-y-bwlch	Abersoch, near Pwllheli.	Geo. F. Pearson -	4	3
Vale of Conway Lead Mining Co., Ltd., 2, Lancaster Place, London, W.C., and Griffith Williams, Slate Quarries Quay,	Vale of Conway -	Trewydyr.	-	_	_
Carnarvon. Peter Jones, 1, Marine Terrace, Portmadoc -	West Port Nigel -	Aberdaron	_	_	
			Totals	203	129
	DENBIGHS				
Mold District Lead Co., Ltd., c/o E. J. Bartlett, 70 and 71, Bishopsgate Street, London, E.C.	Aberduna	Mold.		_	k in o
T. A. Craig, 139, St. Vincent Street, Glasgow	Belgrave	Erryrys, Llanar- mon-in-Yale.	Evan Roberts.	_	Brahman,
J. P. Davies, Flint J. A. Ede, Laburnum Villa, Erryrys, Mold - Cefn-y-gist Mining Company, Minera, Wrex-ham.	Bryn Nant Llech Brynymwyn - Cefn-y-gist -	Llansannan - Llanarmon-in-Yale Minera -	Thos. Williams. J. A. Ede Sampson Michell.	2	
Peter Jones, Maesysafn, Mold John and Richard Roberts and others, J. Roberts, Talwrn, near Llidiartfanny,	Cornwallis West - Craig boeth -	Ruthin Minera	Peter Jones - John Roberts -	1 4	-
Wrexham. Creigiog Mining Co., Ltd., 10, Coleman Street, London, E.C.	Creigiog (formerly Bodidris).	Llanarmon-in-Yale	H. Hotchkiss.		-
Alfred Jones, Crest View, Denbigh	Crest View - (Stopped Nov. 1886.)	Denbigh	Alfred Jones -	2	
Dyffryn Aled Copper Mine Co., Llansannan, Abergelc.	Dyffryn Aled - (Stopped Aug. 1886.) Eglwyseg -	Llansannan - Llangollen -	Richard Douglas - W. Evans -	6	
W. Evans and others. Address: W. Evans, New Brighton, Wrexham. Lady Ann Silver Lead Mining Co., Ltd., 13, Clegg Street, Oldham, and Wm. Francis,	(Stopped Oct. 1886.)  Lady Ann	Near Llanarmon -	William Francis.	_	_
99, Edge Lane, Liverpool.  John Morris Foulkes and Edward Evans,		Minera	J. M. Foulkes	4	_
Church Street, Coedpoeth, Wrexham. Minera Mining Co., Ltd., Minera, near Wrex-	Minera	Minera, near Wrex-	Josiah Ball -	232	277
ham. Minera Mountain Lead Mining Co., Ltd., S. Michell, Minera, Wrexham.	Minera Mountain Mines.	Minera Mountain -	Sampson Michell.	34	27
Minera Consols Co., Ltd., S. P. Gilbert, Devonshire Chambers, Bishopsgate Street, London, E.C.	Minera Consols (includes West Minera).	Minera.	-	-	_
Edwin Wood, Lacey Street, Widnes Nant-y-plwm Lead Mining Co., c/o R. Doug- las Llansannan, Abergele.	Nant Uchaf - Nant-y-plwm - (Started Sept. 1886.)	Abergele. Llansannan -	Richard Douglas -	2	

List of Owners, Mines, and Agents, under the Metalliferous Mines Regulation Acts, in North Wales, Part of South Wales, Shropshire, and the Isle of Man—cont.

Owner or Company, and Postal Address.	Name of Mine.  Italics denote Mines	Situation.	Agent.	Persons of employed the year	
Owner or Company, and Postar Placess.	suspended during the whole of 1886, but not abandoned.			Below Ground.	Above Ground.
	DENBIGHSHI	REcont.			
George Dawes, The Hall, Smethwick, Bir-	Pant Du and Waen-	Parish of Llanferres	Rupert Prince -	3	1
mingham. Pant Clas Mine Co.; W. Francis, 48, Windsor Road, The Brook, Liverpool, and Erryrys.	las. Pant Glas	Llanarmon-in-Yale	William Francis -	2	
Mold. E. Wheldon and H. Ll. Jones, Hill Grove,	Pant-y-gwlanod - (Abandoned in 1886.)	2, 2, 2,		4	2
North Wales Iron Ore Co., W. A. Hills, Anglesey Copper Works, Low Walker,	Ty'n y Caeau -	Abergele -	W. A. Hills.		
Newcastle-on-Tyne. Thomas Williams, Gegin Old Road, Minera,	True Blue	Minera	Thomas Williams	3	1
Wrexham. Tynyddol Mining Co. Address: R. Douglas,	Tynyddol	Llanfairtalhaiarn -	R. Douglas -	3	
Llansannan, Abergele. C. J. Gibbons, Plas Maelor, Wrexham	(Stopped July 1886.) Union and Boun-	Minera, near Wrex-	C. J. Gibbons -	2	
Westminster Mining Co., Llanarmon, near	dary. Westminster -	ham. Llanarmon -	Evan Roberts -	6	
Mold.  John L. M. Fraser, Rhosddu, Wrexham	(Started in 1886.) Westminster Bog-	Llanarmon, Mold -	J. L. M. Fraser.	_	
John D. M. Fraser, Miosada, Wiezham	,, coemenater 20g		Total -	312	308
			2000	====	
	FLINTSE	HRE.			
Thomas Gee, Denbigh	Bodfari	Bodfari.	summittees.		
Rupert Prince and others, Mold	Bryn-hyfryd -	Mold	Rupert Prince -	2	-
T. Hughes and partners, 3, Gladstone Build-	Clwt-y-Militia -	Brynford, Holywell	Robert Evans -	4	
ings, Rhyl. Coitia Mawr Lead Mining Co.; John Lloyd,	Coitia Mawr -	Gwernaffield, Mold	John Lloyd.		
Antelope Inn, Rhydymwyn, Mold. Robert Evans, and Thomas Hughes, 1, Vale	Coppa'r Fran -	Holywell	G. Harrison -	2	<u>-</u>
Road, Rhyl.  East Long Rake Lead Mining Co., Ltd.,  Granite Buildings, 6, Stanley Street, Liver-	East Long Rake -	Rhes-y-Cae, Hal-kin, Holywell.			
pool. John Edwards and Co., Wern Gaer, Rhosesmor,	Ffagnallt	Halkyn	John Edwards -	4	
near Halkyn. J. B. Payne, 28, Brazennose Street, Man-	Flintshire Lead	Mold	Thomas Miners.		_
chester. John Clay, Rhuddlan, near Rhyl	Foel Hiraddug -	Cwm, near Rhyl -	M. A. Gage -	6	
Fron Hall United Mining Co., Ltd., J. E.	Fron Hall United	Gwernymynydd,	John Mansbridge -	3	-
Edwards, Town Hall, Chester. Rev. D. Jones, Brynford Rectory, Holywell -	Gladstone -	Mold. Brynford, Holywell.	parker	-	-
Golden Grove Mine Co., Ltd., Gwaenysgor, Rhyl. W. C. Bew, Venice Chambers, 61,	Golden Grove -	Gwaenysgor -	_	-	
Lord Street, Liverpool. Gorsedd and Sinclair United Mines, Ltd., 7,	Gorsedd and Sin-	Gorsedd, near Holy-	W. T. Harris -	14	2
Queen Victoria Street, London, E.C. Holywell Lime and Cement Co., Ltd.,	clair. Grange	well. Holywell	Robert Peek -	6	
Holywell.  Great Holway Lead Mining Co., Ltd.,	Great Holway -	Holway, near Holy-	W. T. Harris -	69	24
10, Coleman Street, London, E.C. Grosvenor Lead Mining Co., Ltd., 9 and 10, Cambridge Chambers, Lord Street,	Grosvenor	well. Halkyn, near Holywell.	***************************************	-	
Liverpool.  Gwaenysgor Mining Co., Ltd., W. C. Bew,	Gwaenysgor -	Gwaenysgor -		-	-
Venice Chambers, 61, Lord Street, Liverpool. Gwern-y-mynydd Mining Co., Ltd., Mold	Gwern-y-mynydd	Mold	Benjamin Williams	25	11
Halkyn Mining Co., Ltd., Halkyn, Holywell -	Halkyn	Holywell	Matthew Francis -	68	47
Halkyn District Mines Drainage Co., Halkyn,	Halkyn Drainage	Halkyn	F. S. Williams -	1,	
Holywell. Holywell District Lead Co., Ltd., Ethelburga House, Bishopsgate Street, London,	Works. Holywell District (formerly West Holway).		W. T. Harris	10	3
E.C. Samuel Davis and others, Bagillt	Hopeful	Holywell	Thomas Pierce -	2	-
Hope Mountain Silver Lead Mining Co., Ltd. Address: G. Francis, Greenfields,	Hope Mountain -	Ffrith, near Wrex- ham.	George Francis.	-	_
Rhosddu, Wrexham.  Machno Mine Co.; Abel Jones and Co.,  Brynford, near Holywell.	Machno	Grange Common, Holywell.	Abel Jones	2	-

List of Owners, Mines, and Agents, under the Metalliferous Mines Regulation Act, in North Wales, Part of South Wales, Shropshire, and the Isle of Man—cont.

	1		<u>.                                    </u>	T	
Owner or Company, and Postal Address.	Name of Mine.  Italics denote Mines suspended during	Situation.	$oldsymbol{Agent}.$	Persons ordinarily employed during the year 1886.	
	the whole of 1886, but not abandoned.		3	Below Ground.	Above Ground.
	-			'	
	FLINTSHIRI	E—cont.			
James Goddard and Co., Pant-y-go, Halkyn, Holywell.	Moel-y-crio	Halkyn	James Goddard -	3	
Holywell Lime and Cement Co., Ltd., Holy-	Nant	Holywell	Robert Peek -	4	
well.  Evan Roberts & Co., Belgrave Mine, Llanarmon, Mold.	New East Pant Du (formerly East Pant Du).	Nerquis	Evan Roberts.		
Edward and Robert Jones, Holway, Holywell	New Pant-y-Ne -	Holway, Holywell	E. M. Evans	2	
North Henblas Mine Co., Ltd., Mortgagees of Messrs. Laces & Co., Union Court, Liverpool.	North Henblas -	Milwr, Holywell -	W. J. Bew.		
North Hendre Lead Mining Co., Ltd., T. J. Powell, Secretary, 14, Newgate Street, Chester.	North Hendre -	Near Mold	Goodman Ellis -	<b>3</b> 8	3*
John N. Brown, Anglesey House, Handsworth, Birmingham.	North Pant-y-go -	Halkyn	William Wasley -	7	4
A. Champ and T. Pierce, Pantasaph, Holywell	North Pant-y-Ne -	Holywell	T. Pierce	2	_
Pant-y-Buarth and Coed-y-fedw Lead Mines Co., Ltd., Ethelburga House, Bishopsgate Street, London, E.C.	Pant-y-Buarth -	Gwernaffield, near Mold.	Rupert Prince -	5	1
Pant-y-Mwyn Lead Mining Co., Ltd., 41,	Pant-y-Mwyn -	Near Mold.		_	
Ormond Street, Liverpool.  John N. Brown, Anglesey House, Hands-	Pant-y-Pydew	Holywell	Llewelyn Jones -	20	5.
worth, Birmingham. Pant-y-Rhes and Pen-y-bryn Mining Co., Ernest A. Craft, Secretary, Halkyn, Holy- well.	Pant-y-Rhes and Pen-y-bryn.	Halkyn	John Lloyd	2	
	Parry's Mine	Halkyn, Holywell	Jos. Hodgkinson -	2	***************************************
John Phillips and Co., Pen-y-Ball, Holywell -	Picton	Pen-y-Ball, Holy-		_	terrupass.
Plas-yn-Rhos Mining Co., J.H. Lewis, Central	Plas-yn-Rhos -	well. Rhosesmor.	_	_	
Buildings, North John Street, Liverpool. Pwll Gwyn Llan Mining Co., E. Astbury,	Pwll Gwyn Llan -	Ditto	Edward Williams -	2	
Secretary, Grosvenor Cottage, Northop. Rhosesmor Mining Co., Wakefield and Enoch, Secretaries, 16, Corn Exchange Chambers, Chester.	Rhosesmor -	Halkyn, Holywell	Thomas Parry	46	12
Rhydalun Mining Co., Ltd., in liquidation, J. E. Edwards, liquidator, 29, Eastgate Row North, Chester.	Rhydalun	Rhydymwyn, near Mold.	Matthew Francis.	-	
Joseph Edwards, and others, Red Houses, Holywell.	Saithaelwyd -	Holywell.	—		
Cooper and Harding, Sir Edward Mine, Holywell.	Sir Edward -	Holywell -	Joseph Eustice -	2	2
Owen Evans & Co., 14, Dinorwic Street, Carnaryon.	South Pwll Gwyn Llan.	Halkyn -	Owen Evans -		
Speedwell and Grange Lead Mining Co., James Hughes and others, Star Inn, Holy- well.	Speedwell and Grange.	Holywell	James Parry -	2	
Messrs. Bowers, Ffoulkes, and others, c/o T. J. Powell, 14, Newgate Street, Chester.	Talacre	Gronant	Henry Ellis -	70	26
Edward Pierce, Trelogan Hall, Llanasa, Holywell.	Trelogan	Llanasa	Edward Picrce -	4	
Ucha United Mines, Ltd., Gwern-y-mynydd, Mold.	Ucha United	Gwern-y-mynydd, Mold.	Luther Martin -	2	-
Victor Lead Mining Co., Ltd., Thomas Hughes, Secretary, 9 and 10, Cambridge Chambers, Lord Street, Liverpool.	Victor	Rhydymwyn, near Mold.	T. Hughes -	4	3
Vron Lead Mining Co., Ltd., c/o Messrs. Lindsay and Co., 84, Basinghall Street, London, E.C.	Vron - (Abandoned 1885)	Hendre, Mold -		_	1
Henry Jones, Bryn-y-berthen, Ysceifiog, Holywell.	Wagstaff	Halkyn	Henry Jones -	-	
Westminster Consols, Limited, W. Grant, Secretary, 23, Queen Anne's Gate, West- minster, London, S.W.	Westminster Consols	Holywell	Cowell Hilden.	-	
West Halkyn Mining Co., Halkyn, Holywell -	West Halkyn -	Halkyn	E. L. Owen -	_	12
West Trelegan Mine Co. Address: Robert Evans, 1, Vale Road, Rhyl.	West Trelogan -	Llanasa	Robert Evans -	12	7
Robert Griffiths & Co., Gwernaffield, Mold -	White Sand -	Gwernaffield, Mold	Robert Griffiths -	3	
			Totals -	450	163

LIST of OWNERS, MINES, and AGENTS, under the METALLIFEROUS MINES REGULATION ACT, in NORTH WALES, Part of SOUTH WALES, SHROPSHIRE, and the ISLE of MAN—cont.

Owner or Company, and I ostal Address.	Name of Minc.  Italics denote Mincs	Situation.	Agent.	Persons ordinarily employed during the year 1886.	
t	suspended during the whole of 1886, out not abandoned.	Situation.	1150110	Below Ground.	Above Ground.
	MERIONETH	SHIRE.			
n m agg of Hambala DSO		Llanbedr	H. S. Lancaster -	24	9
John Abraham, Northfield, Birmingham - I	Artro Barmouth - British Silver Lead Mine.	Barmouth - Blaenau Festiniog	John Abraham - J. L. M. Fraser.		4
Clogau Mining Company, Ltd., Bont-ddu, Dolgelly.	Clogau	Near Bont-ddu, Dolgelly.	W. A. De la Beche, Ramsay.	-	_
Merionethshire Mining Co., Llanbedr, R.S.O. Henry Maudslay, c/o Messrs. Barnard & Co.,	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Llanbedr Beddgelert.	Edward Stables -	7	_2
47, Lincoln's Inn Fields, London, W.C. Merionethshire Mining Co., Llanbedr, R.S.O.	Cwm Mynach -	2 miles N. of Pen- maenpool.	Edward Stables	36	9
	Diphwys	Near Diphwys Mountain.	H. S. Lancaster -	5	17
4. New Broad Street, London, E.C.	Glasdir   Graigucha -	Llanfachreth, near Dolgelly. 4 miles E. of Llan-	Edward Stables -		5
	Great Manod -	bedr. Manod Mawr, Fes-	B. L. Barrow -	2	
shire. Mawddach Gold Mining Co., Ltd. (in liquida-	Gwynfynydd -	tiniog. Gwynfynydd -	J. N. Longden -	4	-
tion), 19, Birchin Lane, London, E.C. Dyffryn Mining Co., Llanbedr, R.S.O.	Hafotty	Barmouth -	H. S. Lancaster -	35	4
Dyffryn Mining Co., Llanbedr, Merioneth -	Hafod-y-Spytty - Harlech	Festiniog Harlech	H. S. Lancaster.	28 27	7 6
Dyffryn Mining Co., Llanbedr, Merioneth .	Lletty Walter - Moelfre Mynydd Llanbedr	Llanbedr Dyffryn 3 miles E. of Llanbedr.	Edward Stables - H. S. Lancaster - Edward Stables -	21	3 5
	Mynydd Nodol - Penisarcwm -	Bala - 2 miles E.S.E. of Llanbedr.	Edward Halse - Edward Stables -	12	23 6
Henry Maudslay, c/o Messrs. Barnard & Co., 47, Lincoln's Inn Fields, London, W.C.	Sygun	Beddgelert	Charles Kneebone	-	1
			Totals	212	101
	MONTGOMER	VCHIDE	,		
F. C. Hills & Co., Deptford, London, S.E	Berwyn Phosphorite		-	-	ı —
Caelan, Cefn Gwyn, and Potosi United Mining	Caelan	Pennant, Llanbryn-	John Hughes -	4	1
Co., Limited, Ynysfaig House, viâ Dolgelly, and J. B. Masefield, Secretary, Ledbury, Herefordsbire.		mair.			_
Herefordsbire.	Cwmbyr				_
J. Hughes Jones and Griffith W. Griffiths, Machynlleth.		Penegoes, Ma- chynlleth.	G. W. Griffiths -	_	_
J. Hughes Jones and Griffith W. Griffiths, Machynlleth. Cwmorog Silver Lead Mining Co., Ltd., 114. Colmore Street, Birmingham.	Cwmorog	chynlleth. Llangynog -	A. E. Wenham.		
J. Hughes Jones and Griffith W. Griffiths, Machynlleth. Cwmorog Silver Lead Mining Co., Ltd., 114, Colmore Street, Birmingham. Frederick Last and Sons, Albert Buildings, 49, Queen Victoria Street, London, E.C. Blaentwymyn Mining Syndicate, Ltd., 20,		chynlleth. Llangynog -			
J. Hughes Jones and Griffith W. Griffiths, Machynlleth. Cwmorog Silver Lead Mining Co., Ltd., 114, Colmore Street, Birmingham. Frederick Last and Sons, Albert Buildings,	Cwmoroy Cyfartha - Dylife Geifron and Gwes-	chynlleth. Llangynog - Penegoes - Llanbrynmair -	A. E. Wenham. Frank Kitto	- - 2 -	4
J. Hughes Jones and Griffith W. Griffiths, Machynlleth. Cwmorog Silver Lead Mining Co., Ltd., 114, Colmore Street, Birmingham. Frederick Last and Sons, Albert Buildings, 49, Queen Victoria Street, London, E.C. Blaentwymyn Mining Syndicate, Ltd., 20, Moorgate Street, London, E.C. John Kitto and others, Lianidloes  W. Lefeaux and Co., Llanidloes	Cwmoroy Cyfartha - Dylife	chynlleth. Llangynog - Penegoes Llanbrynmair - Near Llanidloes - Ditto	A. E. Wenham.  Frank Kitto  Evan Evans	2 - 2	4
J. Hughes Jones and Griffith W. Griffiths, Machynlleth. Cwmorog Silver Lead Mining Co., Ltd., 114, Colmore Street, Birmingham. Frederick Last and Sons, Albert Buildings, 49, Queen Victoria Street, London, E.C. Blaentwymyn Mining Syndicate, Ltd., 20, Moorgate Street, London, E.C. John Kitto and others, Lianidloes	Cwmorog  Cyfartha -  Dylife  Geifron and Gwestyn.  Glangwden  Llanerchyraur -  Middletown Hill -  (Abandoned July	chynlleth. Llangynog - Penegoes Llanbrynmair - Near Llanidloes - Ditto	A. E. Wenham.  Frank Kitto  Evan Evans  J. Kitto.  W. J. Lefeaux.	_	4
J. Hughes Jones and Griffith W. Griffiths, Machynlleth. Cwmorog Silver Lead Mining Co., Ltd., 114, Colmore Street, Birmingham. Frederick Last and Sons, Albert Buildings, 49, Queen Victoria Street, London, E.C. Blaentwymyn Mining Syndicate, Ltd., 20, Moorgate Street, London, E.C. John Kitto and others, Lianidloes W. Lefeaux and Co., Llanidloes Sir John Conroy, Bart., Keble College, Oxford.	Cwmoroy  Cyfartha -  Dylife  Geifron and Gwestyn.  Glangwden  Llanerchyraur -  Middletown Hill -	chynlleth. Llangynog - Penegoes Llanbrynmair - Near Llanidloes - Ditto Llanbrynmair -	A. E. Wenham.  Frank Kitto  Evan Evans  J. Kitto.  W. J. Lefeaux. Thomas Owen.	_ 	4
J. Hughes Jones and Griffith W. Griffiths, Machynlleth.  Cwmorog Silver Lead Mining Co., Ltd., 114, Colmore Street, Birmingham.  Frederick Last and Sons, Albert Buildings, 49, Queen Victoria Street, London, E.C.  Blaentwymyn Mining Syndicate, Ltd., 20, Moorgate Street, London, E.C. John Kitto and others, Lianidloes  W. Lefeaux and Co., Llanidloes Sir John Conroy, Bart., Keble College, Oxford. Cliff Dale Barytes Co., Pontesbury, Salop  W. Lefeaux and Co., Llanidloes   W. Lefeaux and Co., Llanidloes  W. Lefeaux and Co., Llanidloes  W. Lefeaux and Co., Llanidloes  New Llangynog Lead Mining Co., Ltd. (in liquidation), Engineer's Office, Ruabon.	Cwmorog  Cyfartha -  Dylife  Geifron and Gwestyn.  Glangwden  Llanerchyraur -  Middletown Hill -  (Abandoned July 1886.)  Nantiago  New Llangynog -	chynlleth. Llangynog - Penegoes Llanbrynmair - Near Llanidloes - Ditto Llanbrynmair - Middletown -  Plynlimmon Mountain. Llangynog, near Oswestry.	A. E. Wenham.  Frank Kitto  Evan Evans  J. Kitto.  W. J. Lefeaux. Thomas Owen.  W. Boustred  W. Lefeaux  Henry Dennis.	- 2 3 4 -	4
J. Hughes Jones and Griffith W. Griffiths, Machynlleth.  Cwmorog Silver Lead Mining Co., Ltd., 114, Colmore Street, Birmingham.  Frederick Last and Sons, Albert Buildings, 49, Queen Victoria Street, London, E.C.  Blaentwymyn Mining Syndicate, Ltd., 20, Moorgate Street, London, E.C.  John Kitto and others, Lianidloes  W. Lefeaux and Co., Llanidloes Sir John Conroy, Bart., Keble College, Oxford.  Cliff Dale Barytes Co., Pontesbury, Salop  W. Lefeaux and Co., Llanidloes  -  New Llangynog Lead Mining Co., Ltd. (in liquidation), Engineer's Office, Ruabon. Penclyn Mining Co., 14, Newgate Street, Chester.	Cwmorog  Cyfartha -  Dylife  Geifron and Gwestyn.  Glangwden  Llanerchyraur -  Middletown Hill -  (Abandoned July 1886.)  Nantiago  New Llangynog -  Penclyn	chynlleth. Llangynog - Penegoes Llanbrynmair - Near Llanidloes - Ditto Llanbrynmair - Middletown -  Plynlimmon Mountain. Llangynog, near Oswestry. Llanidloes -	A. E. Wenham.  Frank Kitto  Evan Evans  J. Kitto.  W. J. Lefeaux. Thomas Owen.  W. Boustred  W. Lefeaux  Henry Dennis.  Leigh Howell		4 - 1
J. Hughes Jones and Griffith W. Griffiths, Machynlleth. Cwmorog Silver Lead Mining Co., Ltd., 114, Colmore Street, Birmingham. Frederick Last and Sons, Albert Buildings, 49, Queen Victoria Street, London, E.C. Blaentwymyn Mining Syndicate, Ltd., 20, Moorgate Street, London, E.C. John Kitto and others, Lianidloes  W. Lefeaux and Co., Llanidloes Sir John Conroy, Bart., Keble College, Oxford. Cliff Dale Barytes Co., Pontesbury, Salop  W. Lefeaux and Co., Llanidloes  New Llangynog Lead Mining Co., Ltd. (in liquidation), Engineer's Office, Ruabon. Penclyn Mining Co., 14, Newgate Street, Chester. Snowbrook Silver Lead Mining Co., Ltd., F. E. Briggs, Secretary, 22, Royal Ex- change Chambers, Leeds.	Cwmorog  Cyfartha -  Dylife  Geifron and Gwestyn.  Glangwden  Llanerchyraur -  Middletown Hill -  (Abandoned July 1886.)  Nantiago  New Llangynog -  Penclyn  Snowbrook	chynlleth. Llangynog - Penegoes Llanbrynmair - Near Llanidloes - Ditto - Llanbrynmair - Middletown -  Plynlimmon Mountain. Llangynog, near Oswestry. Llanidloes - Parish of Llangurig	A. E. Wenham.  Frank Kitto  Evan Evans  J. Kitto.  W. J. Lefeaux. Thomas Owen.  W. Boustred  W. Lefeaux  Henry Dennis.  Leigh Howell  R. B. Edwards.	- 2 3 4 - 5	4 1
J. Hughes Jones and Griffith W. Griffiths, Machynlleth.  Cwmorog Silver Lead Mining Co., Ltd., 114, Colmore Street, Birmingham.  Frederick Last and Sons, Albert Buildings, 49, Queen Victoria Street, London, E.C.  Blaentwymyn Mining Syndicate, Ltd., 20, Moorgate Street, London, E.C. John Kitto and others, Lianidloes  W. Lefeaux and Co., Llanidloes Sir John Conroy, Bart., Keble College, Oxford. Cliff Dale Barytes Co., Pontesbury, Salop  W. Lefeaux and Co., Llanidloes  New Llangynog Lead Mining Co., Ltd. (in liquidation), Engineer's Office, Ruabon. Penclyn Mining Co., 14, Newgate Street, Chester.  Snowbrook Silver Lead Mining Co., Ltd., F. E. Briggs, Secretary, 22, Royal Ex-	Cwmorog  Cyfartha -  Dylife  Geifron and Gwestyn.  Glangwden  Llanerchyraur -  Middletown Hill -  (Abandoned July 1886.)  Nantiago  New Llangynog -  Penclyn  Snowbrook  Ty issa (formerly	chynlleth. Llangynog - Penegoes Llanbrynmair - Near Llanidloes - Ditto - Llanbrynmair - Middletown -  Plynlimmon Mountain. Llangynog, near Oswestry. Llanidloes - Parish of Llangurig	A. E. Wenham.  Frank Kitto  Evan Evans  J. Kitto.  W. J. Lefeaux. Thomas Owen.  W. Boustred  W. Lefeaux  Henry Dennis.  Leigh Howell  R. B. Edwards.  Thomas Owen	- 2 3 4 - 5 - 2	4
J. Hughes Jones and Griffith W. Griffiths, Machynlleth. Cwmorog Silver Lead Mining Co., Ltd., 114, Colmore Street, Birmingham. Frederick Last and Sons, Albert Buildings, 49, Queen Victoria Street, London, E.C. Blaentwymyn Mining Syndicate, Ltd., 20, Moorgate Street, London, E.C. John Kitto and others, Lianidloes  W. Lefeaux and Co., Llanidloes Sir John Conroy, Bart., Keble College, Oxford. Cliff Dale Barytes Co., Pontesbury, Salop  W. Lefeaux and Co., Llanidloes  New Llangynog Lead Mining Co., Ltd. (in liquidation), Engineer's Office, Ruabon. Penclyn Mining Co., 14, Newgate Street, Chester. Snowbrook Silver Lead Mining Co., Ltd., F. E. Briggs, Secretary, 22, Royal Ex- change Chambers, Leeds.	Cwmorog  Cyfartha -  Dylife  Geifron and Gwestyn.  Glangwden  Llanerchyraur -  Middletown Hill -  (Abandoned July 1886.)  Nantiago  New Llangynog -  Penclyn  Snowbrook	chynlleth. Llangynog - Penegoes Llanbrynmair - Near Llanidloes - Ditto - Llanbrynmair - Middletown -  Plynlimmon Mountain. Llangynog, near Oswestry. Llanidloes - Parish of Llangurig	A. E. Wenham.  Frank Kitto  Evan Evans  J. Kitto.  W. J. Lefeaux. Thomas Owen.  W. Boustred  W. Lefeaux  Henry Dennis.  Leigh Howell  R. B. Edwards.  Thomas Owen  W. H. Williams	- 2 3 4 - 5 - 2	- 4 1 - 73

LIST of OWNERS, MINES, and AGENTS, under the METALLIFEROUS MINES REGULATION ACT, in North Wales, Part of South Wales, Shropshire, and the Isle of Man—cont.

		<u></u>		
Name of Mine.  Italics denote Mines	Situation.	Agent.	employe	ordinarily d during ar 1886.
the whole of 1886, but not abandoned.			Below Ground.	Above Ground.
MONTGOMERYS	HIRE—cont.			
Weston West Wye Valley	Chirbury Pantmawr	W. R. Croft J. Kitto and Son.	_4	=
Wye (formerly Wye Valley).	Llangurig -	J. Kitto and Son.		
		Totals -	95	81
RADNORSH	HRE.			
	St. Harmon -	Thomas Meredith -	2	
SHROPSH	IRE.			
		Anthun Waters and		1
J		Son.		
	Middletown			11
(Abandoned June 1886.)		-		
East Roman Gravels	Worthen -	Son.	5	1
East Wotherton -	Near Chirbury -	Wm. Boustred -	10	1
Pennerley	Worthen Minsterley	Arthur Waters and		3
Parking Roach	Worthon	Son.	5	,
Roman Gravels -	Minsterley			1 58
Roman Gravels	Ditto	Son.	_	_
Snailbeach -	Minsterle <b>y</b>	Henry Dennis -	89	61
Gravels(including	Ditto	S. M. Ridge	13	1
Steeraway - Tankerville -	Wellington - Worthen -	John O. Owen - Arthur Waters and Son.	16	_4
Wotherton	Chirbury	Wm. Vincent -	12	22
4		Totals -	287	166
ISLE OF	MAN.			
Bell Abbey and   Falcon Cliff.	Rushen.	_	-	_
Central Foxdale -	Marown -	John Gendle -	58	33
Foxdale	Foxdale	Wm. Kitto -	233	193
Garth	Marown	W. H. Kitto	2	_
Great Laxey -	Laxey Glen - Castletown.	F. Reddicliffe -	275	205 —
North Laxey -	8		-	_
Rushen Snaefell	Colby Lonan	R. Barkell - J. Kewley -	8 20	5 20
		Totals -	596	456
	Italics denote Mines suspended during the whole of 1886, but not abandoned.  MONTGOMERYS.  Weston	MONTGOMERYSHIRE—cont.	Raddies denote Mines suspended during the whole of 1886, but not abandoned.	Name of Mines   Situation   Agent   Agent   Below   Below

LIST of OWNERS, MINES, and AGENTS, under the METALLIFEROUS MINES REGULATION ACT, in NORTH WALES, Part of SOUTH WALES, SHROPSHIRE, and the ISLE OF MAN—cont.

	1			1	
O-war on Common and Poetal Address	Name of Mine.	Situation.	Agent.	Persons of employed the year	
Owner or Company, and Postal Address.	suspended during the whole of 1886, but not abandoned.			Below Ground.	Above Ground.
	SLATE M	INES.			
•	CARNARVON	ISHIRE.			
Bugail Slate Co., Ltd., Portmadoc -	Bugail	Parish of Pen- machno.	Owen Williams -	18	35
O. C. Hughes, Trefriw, R.S.O Prince Llewelyn Slate Co., 36, Chapel Street, Liverpool.	Clogwyn Prince Llewelyn -	Trefriw Dolwyddelen -	O. C. Hughes - Daniel Williams -	5 4	5 5
Prince of Wales Slate Co., Ltd., St. Clement's House, Clement's Lane, London, E.C.	Prince of Wales -	Rhyd-ddu	Geo. J. Gray	5	8
Pestiniog Slate Co., Ltd., Deganway, Conway.	Rhiwbach (Old and New).	Rhiwbach, Pen- machno.	Jas. G. Tuxford - Totals -	17	$\frac{120}{173}$
	DENBIGHS	SHIRE.			
Thomas Ford, Hallfield, Alfreton	Craig-yr-oryn -	Glyn Ceiriog, Llan-	T. L. Phillips -	1	1
Maengwynedd Slate and Slab Co., Llan-	Maengwynedd -	gollen. Llanrhaiadr -	Wm. Thos. Owen	2	qu-ann
rhaiadr, Oswestry. Pantglas Slate and Slab Quarry Co., Ltd., Llangollen.	Pantglas Middle-vein.	Eglwyseg Llan- gollen.	F. E. Rooper -	4	
			- 25	7	1
	MERIONETE	ISHIRE.			
Abercorris Slate and Slab Co., Ltd.,		Corris	J. W. Orchard	16	21
Corris, Machynlleth. R. D. Pryce, Cyfronydd, near Welshpool	Aberllefenny .	Aberllefenny, near Corris.	David Jones -	72	68
John Jones, Tyisafyrhos, Grocslon, R.S.O., Carnarvon. Braichgoch Slate Quarry Co., Ltd., Corris,	Braich Ddu - Braichgoch (in-	Maentwrog and Trawsfynydd.	— Edwd. Williams -	135	122
R.S.O. W. McConnel, Towyn, R.S.O.	cluding Gaewern). Bryneglwys and	Llanfihangel-y-Pen-		144	131
Bwlch-y-Slater Slate Quarry Co., 36, Eastgate	Cantrybedd. Bwlch-y-Slater -	Festiniog	F. F. Brown -	22	19
Street, Chester. Carlyle Slate and Slab Co., Ltd., Dinas Mawddwy.	Carlyle -	Dinas Mawddwy -	W. H. Bullock -	15	11
New Conglog Slate and Slab Co., Ltd., 20, Princess Square, Plymouth. Samuel Pope—Address: Thomas Williams,	Croesor -	Tan-y-grisiau,Blae- nau Festiniog. Cwm Croesor,	John K. Rowe - Thos. Williams	6	5
Bryn Croesor, Penrhyndeudraeth.		Parish of Llanfro- then.	***		
Wm. Boggett, 97, Cheyne Walk, Chelsea -	Crown	Penrhyn-gwyn,Dol-gelly.		3	2
Cwmorthin Slate Co., Ltd., Tan-y-grisiau, Blaenau Festiniog.	Cwmorthin -	Tan-y-grisiau, Fes- tiniog.	Andreas Roberts -	223	205
Lewis H. Evans, 33, Walbrook, London, E.C. H. N. Hughes, Harvey Buildings, 24, James Street, Liverpool.	Cyfanedd Cymerau -	Arthog	L. H. Evans - Evan Griffith -	8 18	9
Diphwys Casson Slate Co., Ltd., Blaenau	Diphwys Casson -	Blaenau Festiniog	E. P. Jones -	67	151
Festiniog. Fronboeth and Pantmawr Slate and Slab	Fronboeth and	Moelwyn	D. J. Davis	18	4
Quarry Co., Ltd., Eifion House, Portmadoc. G. A. Walker and Co., Henddol Quarry,	Pantmawr. Henddol	Dolgelly	W. C. Logan -	23	19
Ynysfaig, viâ Dolgelly. John W. Greaves and Sons, Blaenau Fes-	Llechwedd -	Blacnau Festiniog	Evan Thomas -	178	230
tiniog. Maen Offeren Slate Quarry Co., Ltd.,	Maen Offeren -	Ditto -	William Owen -	158	140
4, East India Avenue, London, E.C.  Moelferna and Dee Side Slate and Slab Co.,  Limited Glyndyfrdwy, Llangollen.	Moelferna		Richard Roberts -	21	25
Robert Evans, 28, Bridge Street, Birkenhead		tiniog.	_	_	_
The Oakeley Slate Quarries Co., Ltd., 3, Old Palace Yard, Westminster Abbey,	Oakeley Middle Quarry.	Blaenau Festiniog	A. M. Dunlop -	163	139
London, S.W. Ditto Ditto -	Oakeley Upper Quarry.	Ditto -	Ditto -	186	197
Welsh Slate Co., J. R. Regnell, Secretary, 8, Adelphi Terrace, London, W.C.	Palmerston -	Ditto -	Robert Owen -	308	362
James Staveley, c/o Geo. Curwen, Fenton- ville, Ashton-on-Ribble, Preston.	Park	Llanfrothen -	Wm. Kellow -	. 4	13

LIST of OWNERS, MINES, and AGENTS, under the METALLIFEROUS MINES REGULATION ACT, in NORTH WALES, Part of SOUTH WALES, SHROPSHIRE, and the ISLE OF MAN—cont.

Owner or Company, and Postal Address.	Name of Mine.  Italics denote Mines suspended during Situation.	Situation.	Agent.	employe	ordinarily d during or 1886.
Owner or Company, and I ostal Address.	suspended during the whole of 1886, but not abandoned.	<i>2</i>		Below Ground.	Above Ground.
	MERIONETHSI	HIKEcont.			
The Representatives of the late J. Parry Jones	Penarth	Corwen	T. S. Phillips -	9	18
and E. H. Phillips, Denbigh & Corwen. H. N. Hughes, Harvey Buildings, 24, James	Ratgoed	Corris	Evan Griffith -	8	6
Street, Liverpool. New Rhosydd Slate and Slab Co., Ltd.,	Rhosydd	Tan-y-grisiau, Fes-	W. W. Morris -	101	9.7
Tan-y-grisiau. Voelgron Slate Quarry Co., : Address O. R. Owen, Bowydd Buildings, Blaenau Fes-	Voelgron	East of Festiniog -	O. R. Owen	_	
tiniog. Votty and Bowydd Slate Quarries Co.,	Votty and Bowydd	Blaenau Festiniog	J. Lloyd Jones -	243	147
Ltd., Blaenau Festiniog. Wrysgan Slate Quarry Co., Ltd., John Jones, Secretary, Portmadoc, R.S.O.	Wrysgan	Tan-y-grisiau, Festiniog.	Robert Roberts -	53	46
,		1	'Totals -	2,202	2,187
		1			
	MONTGOME	RYSHIRE.			
Rhiwarth Slate and Slab Co., Owen Roberts, Secretary, Llangynog, Oswestry.	Rhiwarth	Llangynog	O. Roberts	5	

# LIST of OWNERS and OPENWORKS in Parts of North and South Wales, and in the Isle of Man.

Owner or Company, and Postal Address.	Name of Openwork.  Name of suspended Openworks in  Italics.	Situation.	Agent.	Persons ordinarily employed during the Year 1886.
	ANGLESEY.			
Amlwch Gas and Chemical Co., T. F. Evans, Amlwch.	Amlwch Chemical   Works.	Amlwch	T. F. Evans	30
	BRECONSHIRE	<b>C.</b>		
R. Lewis Lloyd, Cwm Elan, Rhayader, and United University Club, Pall Mall, London.	Dalrhiw	Rhayader		4
	CARDIGANSH	IRE.		
Cardigan Slate Quarrics, Ltd., 107, Cannon Street, London, E.C.	Cardigan	Glandovey -	-	18
	CARNARVONSHI	IRE.		
Alexandra Slate Co., Ltd., Camarvon - Bangor and Carnarvon Welsh Slate Co., Morgan Richards, Bangor.	Alexandra Bangor and Carnarvon, & West Dorothea	Moel Tryfan Nantlle	John Menzies - Morgan Richards -	*
John Pearson, Braich Slate and Coedmadog Co.,	Braich	Moel Tryfan -	. W. B. Jeffrey -	*
Carnarvon. G. W. Cooke, Bryn Quarry, Bangor	Brynhafod-y-Wern	Llanllechid -	G. W. Cooke.	_
Bryn Mawr Slate Co., Llanberis	Bryn Mawr -	Llanberis - ·	Thomas Colliver.	*
Sir Llewelyn Turner, Parkia, Carnaryon -	Brynyfferan - Bwlch-y-ddcilor -	THEOUR TRY		4
William Dew, Brynbras Castle, Carnarvon John Jones, Winc Merchant, Carnarvon -	Caergors -	Beddgelert.		-
J. T. Campbell, 17, Warwick Street, Regent	Caermeinciau -	Llanberis -	- W. B. Jeffrey.	
Street, London, W. Capel Curig Slate Co., Ltd., 14, Brown St.,	Capel Curig -	Capel Curig	D. W. Evans	48
Manchester. Llanberis Slate Co., Ltd., Carnarvon - Cilgwyn Slate Co., Carnarvon -	Cefn Du Cilgwyn	Llanberis - Nantlle -	John Menzies - W. H. Carter -	* 287

LIST of OWNERS, and OPENWORKS in Parts of North and South Wales, and in the Isle of Man-cont.

	ISLE of MAN—-c	ON6.					
Owner or Company, and Postal Address.	Name of Openwork.  Names of suspended Openworks in Italies.	Situation.	Agent.	Persons ordinarily employed during the Year 1886.			
CARNARVONSHIRE—cont.							
John Armor Hughes, solicitor, Porthyraur, Car-	Clogwyn-y-Gwin -	Rhyd-ddu, Carnar- von.	_	_			
narvon.  John Pearson, Braich and Coed Madog Slate Co.,	Coed Madog -	Nantlle	W. B. Jeffrey -	*			
Carnarvon. G. and J. Hughes, Ceunant, Llanrug - G. W. Duff Assheton Smith, Dinorwic Quarries,	Cook and Ddol - Dinorwic	Llanberis Ditto -	W. W. Vivian -	<b>2</b> 8 *			
Llanberis. Dorothea Slate Quarry Co., Nantlle, Pen-y-groes,	Dorothea -	Nantlle	O. T. Owen -	>k			
R.S.O. Foel Clynnog Slate Quarries, Ltd., Pen-y-groes R.S.O., Carnarvonshire, and W. Hooper, Secretary, 2, Bank Buildings, Princes St., London, E.C.	Foel Clynnog -	Pen-y-groes -	W. Hooper -	3			
Victoria Slate Quarry Co., Ltd., 13, Clegg Street, Oldham.	Gallt-y-fedw - (Stopped May 1885.)	Nantlle.	*****	_			
John Findlay and others, 24, Grant Street, Glasgow.	Gallt-y-llan -	Llanberis	Thomas White.				
Glanrafon Slate Quarry Co., Quay, Carnarvon -	Glanrafon -	Rhyd-ddu	Edward H. Owen (acting partner).	140			
Glynrhonwy Slate Quarry Co., Ltd., Carnarvon - John Horne, Gwernor, Talysarn, Pen-y-groes,	Glynrhonwy - Gwernor	Llanberis - Nantlle	G. C. Broadway -	183 4			
R.S.O.  Bettws-y-eoed Slab, Slate, and Cistern Quarry	Hafodlas	Bettws-y-coed -	_	15			
Co., Ltd. Wilson & Co., Waenfawr, Carnarvon William Jones, Parkia, Carnarvon North Wales Quarrymen's Union Co., 7 Market	Hafod-y-wern - Llwyd-coed - Llyn-y-gader -	Waen Fawr - Llanllyfni - Rhyd-ddu -	W. Jones - Rowland Morris	* 4 *			
Co., Carnarvon.  Moel Tryfan Slate and Slab Quarry Co., Ltd.,		Moel Tryfan -		120			
Carnaryon. John Leigh & Co., 30, Brown Street, Manchester	Nantlle Vale (formerly Tymawr	Nantlle.	_	_			
New Vronheulog Slate Co., Ltd., Llanllyfni,	East). New Vronheulog -	Ditto	_	*			
Pen-y-groes, R.S.O.  John Williams, 3. Cable Street, Liverpool  J. G. Cooper, 63, Church Street, Manchester  Penmaehno Slate Co., Ltd., 10, South John	Pantdreiniog - Penllyn Penmachno -	Bethesda - Dolwyddelen - Penmachno -	Thomas P. Owen - W. Owen Alfred Carter -	1 30 *			
Street, Liverpool.  Lord Penrhyn. Address: E. A. Young, Port	Penrhyn	Bethesda	E. A. Young -	*			
Penrhyn, Bangor. Pen-y-Bryn Slate Co., Ltd., Carnarvon Penyrorsedd Slate Quarry Co., Ltd., Nantlle Plas-y-nant Slate Quarry Co., Ltd., Bettws	Pen-y-Bryn - Penyrorsedd - Plas-y-nant -	Nantlle Ditto Bettws Garmon -	S. W. Davids - David J. Jones.	210 300 —			
Garmon, Carnarvon. South Dorothea Slate Quarry Co., Quay, Car-	South Dorothea -	Nantlle	Griffith Williams -	61			
narvon.  John Robinson, Talysarn Slate Quarries, Nantlle	Talysarp and West	Ditto -	John Robinson -	*			
Vale, Carnarvon. Upper Glynrhonwy Slate Co. Address: T. Adams.	Tymawr. Upper Glynrhonwy	Llanberis	T. Adams	109			
16, Cambridge Street, Birmingham. Bangor and Carnarvon Welsh Slate Co., Bangor	Vale	Nantlle	Morgan Richards -	*			
Vron and Old Braich Welsh Slate Quarries Co. Limited, Carnarvon.	, Vron -	Do.		96			
	* Number	s given confidentially		6,838			
			Total	8,481			
	DENBIGHSHI	RE.					
George and F. E. Rooper, Llangollen	Cambrian	Glynceiriog -		*			
Llangollen Slab and Slate Co., Ltd., Llangollen	Clogie and Foel	Llangollen	John Taylor and Sons.	*			
Robert Williams, Minera Limestone Quarry		Minera	R. Williams -	_			
Wrexham. Pantglas Slate and Slab Quarry Co., Ltd.	, Pantglas	Eglwyseg, Llan- gollen.	Price Evans -	18			
Llangollen. Ditto	Wynne	Glynceiriog, Llan- gollen.	Price Evans -	27			
* Numbers given confidentially							
			Total -	113			

# REPORTS OF INSPECTORS OF MINES.

LIST of OWNERS, and OPENWORKS in Parts of North and South Wales, and in the Isle of Man-cont.

		•					
Owner or Company, and Postal Address.	Name of Openworks  Names of suspender  Openworks in  Italics.	· · · · · · · · · · · · · · · · · · ·	Agent.	Persons ordinarily employed during the Year 1886.			
FLINTSHIRE.							
Talargoch Mining Co., Rhyl (dressing old mine-heaps).		Rhyl -	John Lean -	37			
MERIONETHSHIRE.							
Abercwmeiddaw Slate Quarry Co., Ltd., Corris,			-65				
R.S.U.				* *			
John Lang, 7, Crown Gardens, Dowanhill, Glas- gow.	Cefn Cam - 864	eltyd.	. <u>•</u>	5			
Thomas Miller Whittaker, Eltham Road, London, S.E.	Craig ddu	Blaenau Festiniog	Riehard Bowton -	130			
John Jenkins, Snowdon House, Aberystwith Robert Williams, 17, Clarke Terrace, Carnarvon	Cwmebol	Pennal, Machynlleth		15			
Moelferna and Dee Side Slate and Slab Co	Cwm Teigl     Dee Side	Festiniog Glyndyfrdwy -	Richard Roberts -	*			
Ltd., Glyndyfrdwy, Llangollen. Owen & Mallory, Gartheiniog Slate and Slab	Gartheiniog -	Aberangell -		16			
Quarry, Aberangell, Cemmaes, R.S.O. G. A. Walker & Co., Ynysfaig, viâ Dolgelly	Goleuwern	BarmouthJunction	WCIenn				
Hendreddu Slate and Slab Co., 2, New Street, Bishopsgate Street Without, London, E.	Hendreddu	Aberangell	W. C. Logan	20 33			
W. T. Milner, Creek Bridge Wharf, Greenwich, London, S.E.	Llanderfel	Corwen	die Land	3			
Manod Slate Quarry Co. Address: O. J. Owen, Blaenau Festiniog.	Manod	Blaenau Festiniog	_	**			
George Holcroft, Llanderfel, Corwen T. B. Davies, Plascoch Hotel, Bala	Queen's Tyddynllywarch -	Llanderfel -	_	rt.			
		rs given confidentially	_	0.5			
		is given confidentially		91			
			Total -	313			
MONTGOMERYSHIRE.							
J. Lloyd Jones and Son, Pantperthog, Machynlleth	Llwyngwern -	Corris 1					
J. Williams, Rhiwgwreiddyn Quarry, Ceinws, R.S.O.	Rhiwgwreiddyn -		J. Williams -	*			
West Llaygynog Quarry Co., Llangynog, Oswestry	West Llangynog -	Llangynog -	. —	*			
* Numbers given confidentially							
			Ţotal -	40			
ISLE OF MAN.							
G. Torrance & Co., Douglas, Isle of Man	Ballasalla Umber		G. Torrance -	11			
	Works.		- Louising	11			